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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

VOL. X.

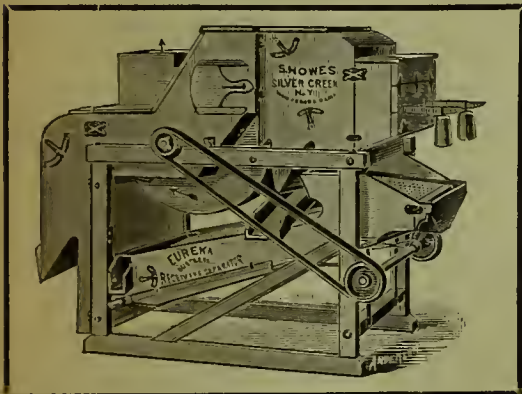
CHICAGO, ILLINOIS, JUNE 15, 1892.

No. 12.

SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM

THE Eureka Grain-Cleaning Machinery

FOR ELEVATOR USE



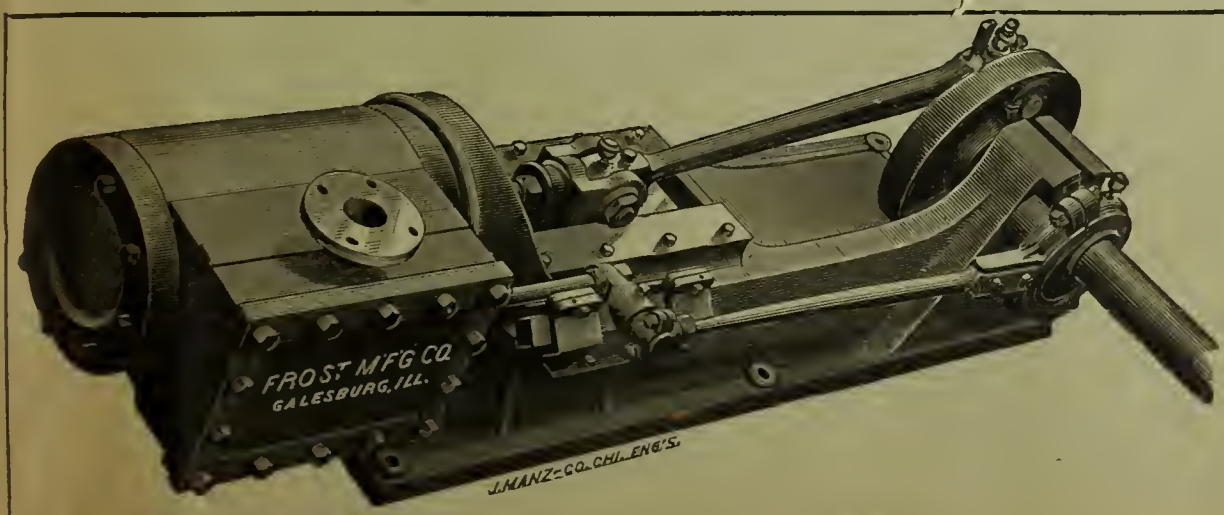
COMPRISES

- The Eureka Warehouse and Elevator Separator.
- The Eureka Double Receiving Separator.
- The Eureka Single Receiving Separator.
- The Eureka Aspirating Separator.
- The Eureka Corn Sheller, Dustless.

For Circulars, prices, etc., address

S. HOWES, SOLE MANUFACTURER, SILVER CREEK, N. Y.

C O N V E Y O R S	<p>*** Elevator Buckets. *** Elevator Boots. *** Elevator Bolts. ***</p> <h2 style="margin: 0;">THORNBURGH MFG. COMPANY,</h2> <h3 style="margin: 0;">MILL AND ELEVATOR SUPPLIES</h3> <p style="margin: 0;">110 & 112 SOUTH JEFFERSON STREET, CHICAGO, ILL.</p> <p style="margin: 0;">Elevating and Conveying Machinery a Specialty.</p> <p>*** PULLEYS. *** SHAFTING. *** HANGERS. ***</p>	B E L T I N G
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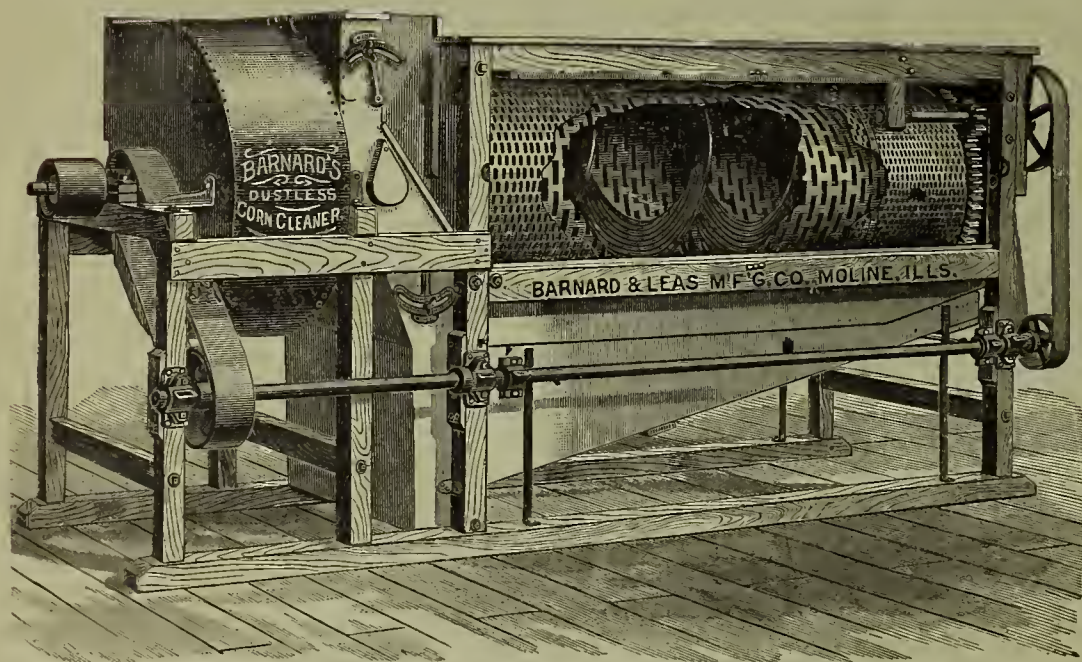
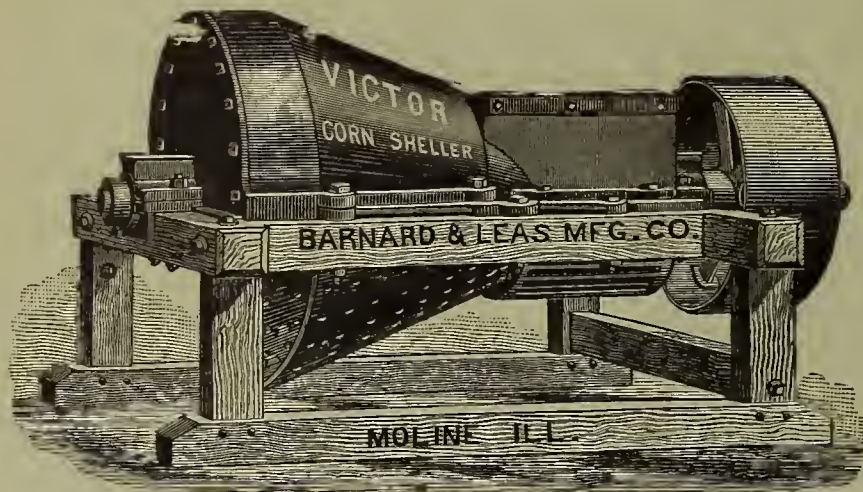


FOR PRICES AND DISCOUNTS
— ON —
Elevator Machinery
AND SUPPLIES
— OF —
EVERY DESCRIPTION,
ADDRESS EITHER STEAM OR HORSE-POWER,
The FROST MFG. CO.,
GALESBURG, ILL.

AMERICAN ELEVATOR AND GRAIN TRADE.

HERE IS THE BEST

Corn Sheller and Cleaner on earth. Be sure and send your orders to Barnard & Leas Mfg. Co., and get the best.



MANUFACTURED ONLY BY

BARNARD & LEAS MFG. CO.,
MOLINE, - - - ILLINOIS.

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Room 3, Chamber of Commerce, INDIANAPOLIS, IND.

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WM. R. DELL & SON, 26 Mark Lane, London, E. C., England.

JOHN ABELL, Toronto, Canada, Sole Manufacturer for the Dominion of Canada.

M. M. SNIDER,
1323 Capitol Avenue, DES MOINES, IOWA.

R. C. STONE, Springfield, Mo.

STUART HARE, Enterprise, Kan.

J. M. ALLEN, Lisbon, North Dakota.

THE EXCELSIOR DUSTLESS

WATKINS & CO., COMMISSION GRAIN,
Chamber of Commerce,

PEORIA, ILL., June 14, 1891.

GENTLEMEN:—We have clipped to this date something like 500 carloads of oats with the No. 6 "Excelsior" Combined Clipper and Polisher we bought of you at an expense of only a very few dollars for repairs to replace clipping wallowers. The machine has always been entirely satisfactory to us. We have never had a car of oats go off grade through any fault of the machine. We are buying a great many oats clipped by the.....Clipper, and selling to same parties as those from your Clipper, and their oats have frequent claims made back on us.

Yours truly, WATKINS & CO.

BELLEVUE, IOWA, April 17, 1891.

GENTS:—Since purchasing our No. 5 Excelsior Combined Out Clipper and Polisher of you in March, 1889, we have clipped and cleaned 150,000 bushels of oats, the loss in clipping averaging 6-10 of a pound per bushel, and we have always got the highest price for No. 2 grade oats, while we make no distinction as to quality in our purchasing, but all going to the same bin. This we consider one of the great advantages of a good Oat Clipper. We have always been well pleased with the machine. Repairs just purchased of you, amounting to \$15.00, is all we have had to pay.

Yours truly, REILING & CO.

HOLSTEIN, IOWA, April 10, 1891.

E. H. PEASE MFG. CO., Racine, Wis.

GENTLEMEN:—In regard to the No. 6 Excelsior Oat Clipper and Polisher, and Separator, I purchased of you last fall. I wish to say that it is highly satisfactory and surpasses my best expectations. I have polished about 150,000 bushels of barley with it, and it does this work very evenly, and does not break nor hull the grain. I am now running it on oats that test 28 pounds to the bushel, and raise them up to 33 and 34 pounds, with a shrinkage of not more than 3 ounces to the bushel.

I hesitated some before buying, but now that I know what it will do, I would not be without it for many times its value.

Yours respectfully, F. S. MANSON.

CHICAGO, ILL., Feb. 24, 1891.

DEAR SIR:

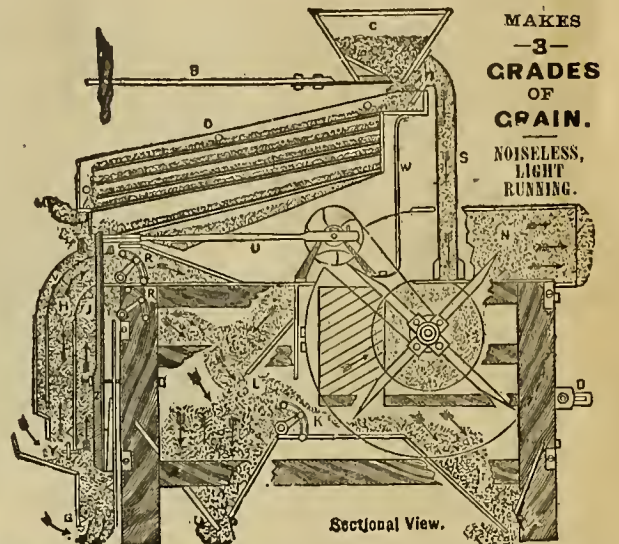
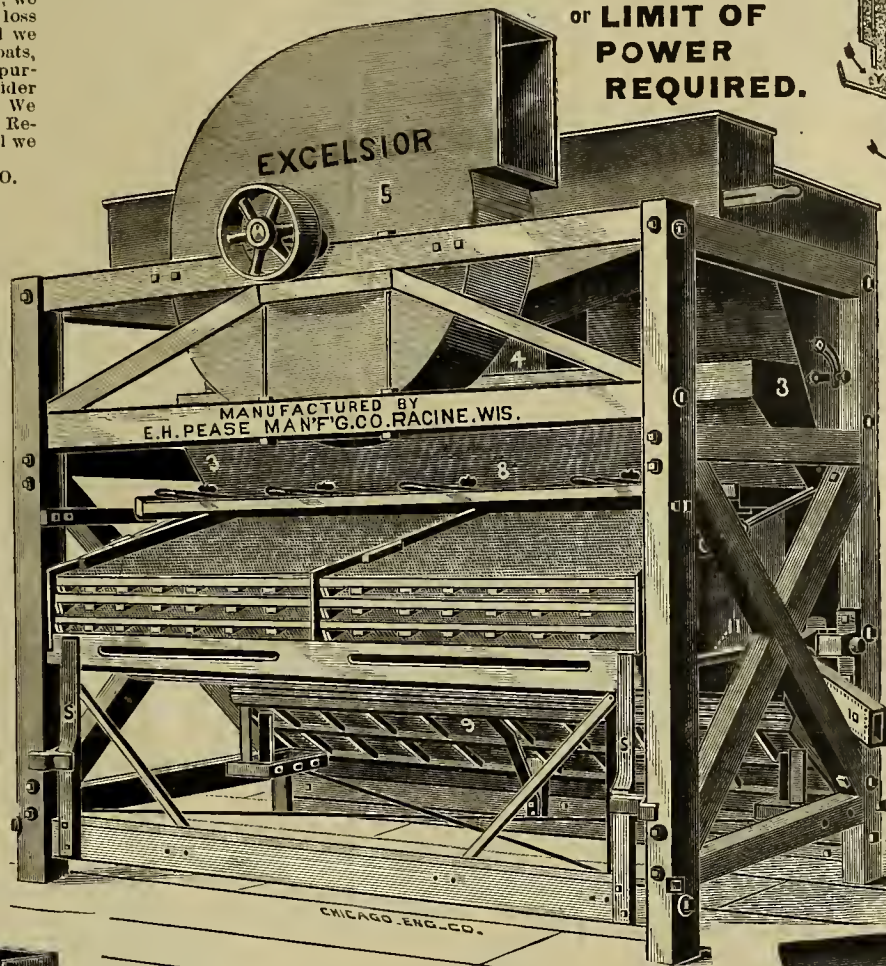
The two No. 8 Excelsior Jr. Oat Clippers we bought of you in June, 1890, are giving splendid satisfaction. We experience no difficulty in raising the weight of oats from 8 to 10 lbs. to the measured bushel. On the 12th inst. we run through the two machines a large lot of very foul No. 3 white oats, testing 27 pounds to the measured bushel, and raised them to a fine, bright quality of No. 2 oats, testing 37 pounds; shrinkage 500 pounds to 1,000 bushels. The shrinkage being largely "hulls," and being separated from the dust, can be utilized in making ground feed.

On the 18th inst. we run 4,500 bushels of oats through in 3 hours, and raised them from No. 3 white, testing 29 lbs., to No. 2, testing 38 lbs.

Yours truly,
COLUMBIA ELEVATOR CO.,
J. E. CAILEY, Sec'y.

MACHINERY

HAS NO SUPERIOR IN POINTS OF
CONSTRUCTION,
DURABILITY,
EXCELLENCE OF WORK,
STILLNESS OF RUNNING,
OR LIMIT OF
POWER
REQUIRED.



"Excelsior" Dustless Separator and Grader

—FOR—
SEPARATING, CLEANING AND GRADING
WHEAT FOR MILLING.
OR ANY KIND OF GRAIN FOR
MERCHANTABLE PURPOSES.

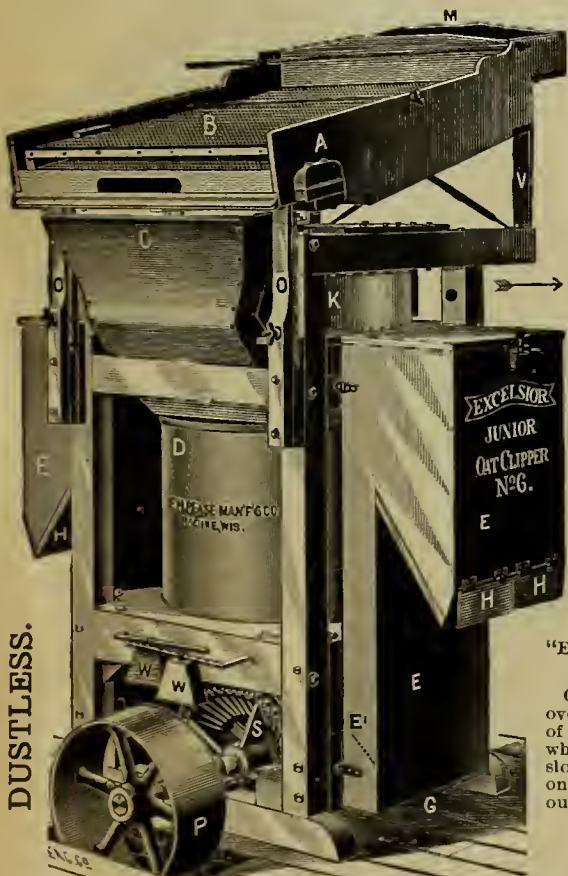
MADE IN 4 SIZES.

CAPACITIES, 150 TO 800 BUSHELS PER HOUR.

CEDAR RAPIDS, IA., Dec. 19, 1890.

GENTS:—The No. 8 EXCELSIOR OAT CLIPPER, SEPARATOR, GRADER AND POLISHER COMBINED, bought of you in January, 1890, is still doing business at the old stand, and giving as good satisfaction as ever. We are now using it to polish barley and it is giving good satisfaction.

Yours truly,
MINER & MORGAN.



"Excelsior" Dustless Elevator Separator.

FOR ALL KINDS OF
GRAIN OR SEEDS.

MADE IN 4 SIZES.

CAPACITIES, FROM 300 TO 2,000 BUSHELS PER HOUR.

HAS LARGE SIEVE SURFACE, POWERFUL
FAN AND PERFECT VENTILATION.

GRAIN SHOE IS COUNTER-BALANCED BY
COUNTER-BALANCE SPRINGS.

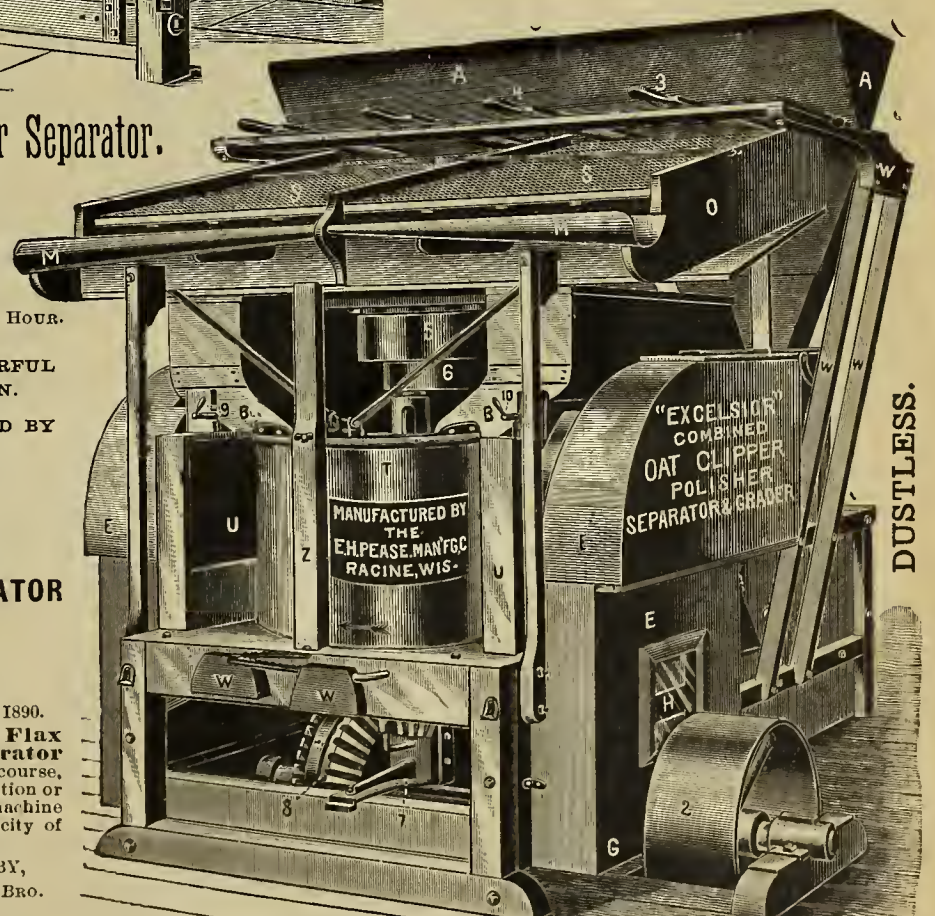
THE SMOOTHEST
—AND—
LIGHTEST RUNNING SEPARATOR
IN THE MARKET.

"ELEVATOR B."

LA CROSSE, WIS., Nov. 6, 1890.

GENTLEMEN:—Have just made a Test Run of Flax over the No. 2 Excelsior Receiver Separator of 775 bushels per hour without crowding. Of course, when flax is very dirty it would require more attention or slower feed. We are very much pleased with the machine on flax and timothy. It adds one-half to the capacity of our flax reels and of our timothy mills.

Yours respectfully, W. B. CLISBY,
Foreman for W. W. CARGILL & BRO.



"EXCELSIOR" OAT CLIPPER, SEPARATOR AND GRADER COMBINED;

ALSO POLISHER, SEPARATOR AND GRADER COMBINED.
THIS "COMBINED" MACHINE May be fitted to fill any or all the capacities of a GENERAL DUST-LESS ELEVATOR RECEIVING SEPARATOR for all kinds of Grain;
OR AS A CLIPPER, CLEANER, POLISHER, SEPARATOR and GRADER OF OATS.
OR AS A POLISHER, SEPARATOR, CLEANER and GRADER of Wheat and Barley.
MADE IN 3 SIZES, WITH CAPACITIES FROM 150 TO 750 BUSHELS PER HOUR.

"EXCELSIOR, JR." OAT CLIPPER, POLISHER and SEPARATOR
FOR CLIPPING, POLISHING, SEPARATING AND
CLEANING OATS.

OR MAY BE FURNISHED WITH SIEVING, ETC.,
FOR POLISHING, CLEANING, SEPARATING AND
GRADING WHEAT OR BARLEY.

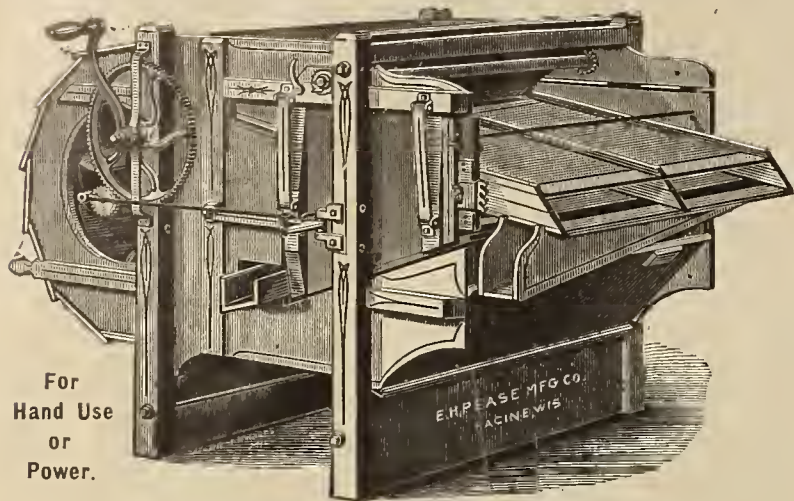
MADE IN 2 SIZES. CAPACITIES, 250 TO 600 BUSHELS PER HOUR.

SEND FOR
CATALOGUE
AND
PRICES
—TO—

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 390, 391, 392, 393.

PEASE WAREHOUSE FANNING MILLS.



For
Hand Use
or
Power.

The "Pease" Side Shake Mills.

The Cut shows the "Right," or Crank side. On the opposite side are tight and loose Pulleys. These mills are not only a first class mill for general work but are also specially adapted for all kinds of seed cleaning as is attested by the following unsolicited letter, which we publish by permission:

ST. CHARLES, MINN., April 12, 1890.

E. H. PEASE MFG. CO., Racine, Wis.:

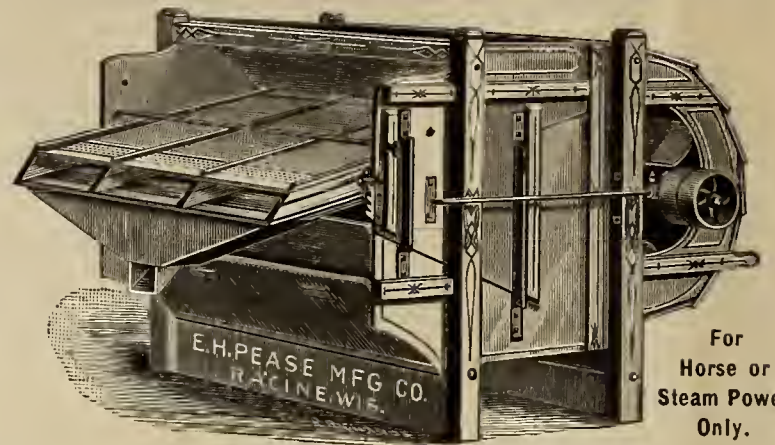
Gentlemen:—We have started the No. 2 Mill which we bought from you a short time ago. We find it to be the best Timothy Cleaner we ever saw. It cleans very fast and does fine work. It is far ahead of the — mill for cleaning timothy. We also use a — mill, but it does not come up to the No. 2 side shake we bought of you. Your No. 2 will clean timothy about three times as fast as the — mill does, and does better work than the — does. Your mill is well built and strong. We would not give our No. 2 "Pease" Side Shake for any two — that we ever saw. Very truly,

J. B. ZECHES & CO.

NOTE—The No. 0 machine is not fitted to run by hand power.

	No. 3.	No. 2.	No. 1.	No. 0.
Extreme Height.....	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.
Size over all.....	5 ft 2 in. x 3 ft 4 in	5 ft. 2 in. x 4 ft.	5 ft 2 in x 4 ft 9 in	5 ft 2 in x 5 ft 9 in
Floor to center of pulley.....	25½ in.	25½ in.	25½ in.	25½ in.
Driving pulley.....	6 in. x 2 in.	6 in. x 2 in.	6 in. x 2 in.	6 in. x 3 in.
Revolutions per minute.....	275	275	275	275
Size of hurdles.....	2 ft. 6 in. x 24 in.	3 ft. 2 in. x 24 in.	4 ft. x 24 in.	5 ft. x 24 in.
Capacity per hour.....	100 to 200 bu.	125 to 250 bu.	175 to 350 bu.	250 to 450 bu.

HAVE
THE
LARGEST
SALES
OF
ANY
MADE
IN
THE
UNITED
STATES



For
Horse or
Steam Power
Only.

The "Pease" End Shake Mills.

Particularly adapted for use in Horse Power Elevators where power is limited and close cleaning and grading desired. It is strong, durable and noiseless.

The shoe is supported by STEEL springs, hung from above and vibrated by flexible shake-rods with ADJUSTABLE ECCENTRICS. The shake is from front to back, instead of from side to side.

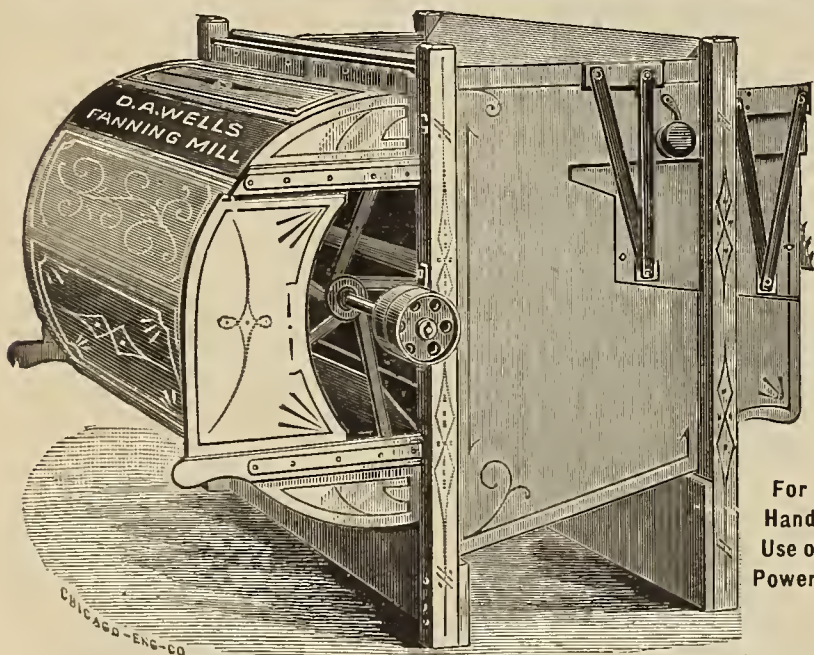
They are fitted with a patent adjustable hopper raiser, not shown in cut, which gives an even flow of grain upon the sieves.

These Mills have MUCH GREATER CAPACITY than any other kind of equal sizes. They are especially adapted for cleaning ALL KINDS OF GRAIN. The side shake Mills are better adapted for cleaning Clover, Timothy, Flax, etc.

NOTE—The pulleys are placed on the RIGHT side of mills or opposite to those showing in this cut, unless otherwise ordered.

	No. 3.	No. 2.	No. 1.	No. 0.	No. 00
Extreme Height.....	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.	3 ft. 6 in.
Size over all.....	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.	5 ft. 9 in. x 5 ft. 9 in.
Floor to center of pulley.....	25½ in.	25½ in.	25½ in.	25½ in.	25½ in.
Driving pulleys.....	6 in. x 2 in.	6 in. x 2 in.	6 in. x 2 in.	6 in. x 3 in.	6 in. x 3 in.
Revolutions per minute.....	450	450	450	450	450
Size of hurdle.....	2 ft. 6 in. x 30 in.	3 ft. 2 in. x 30 in.	4 ft. x 30 in.	5 ft. x 30 in.	6 ft. x 30 in.
Capacity per hour.....	125 to 250 bu	150 to 300 bu	200 to 400 bu	250 to 500 bu	300 to 600 bu

THESE MACHINES CAN BE FURNISHED WITH SPECIAL SIEVING TO HANDLE ANY KIND OF GRAIN OR SEEDS.



For
Hand
Use or
Power.

The "D. A. Wells" Warehouse Fanning Mill. WARRANTED

To clean CORN or OATS at the rate of 800 to 1,000 bushels per hour with the equal of ONE MAN POWER. Sold SUBJECT TO TRIAL. SATISFACTION GUARANTEED!

Designed for locations where power is limited and rapid cleaning is more of an object than close grading.

They have a much larger capacity than our "Pease" Warehouse Mills, but having a larger fan, do not require as high a motion and consequently require less power.

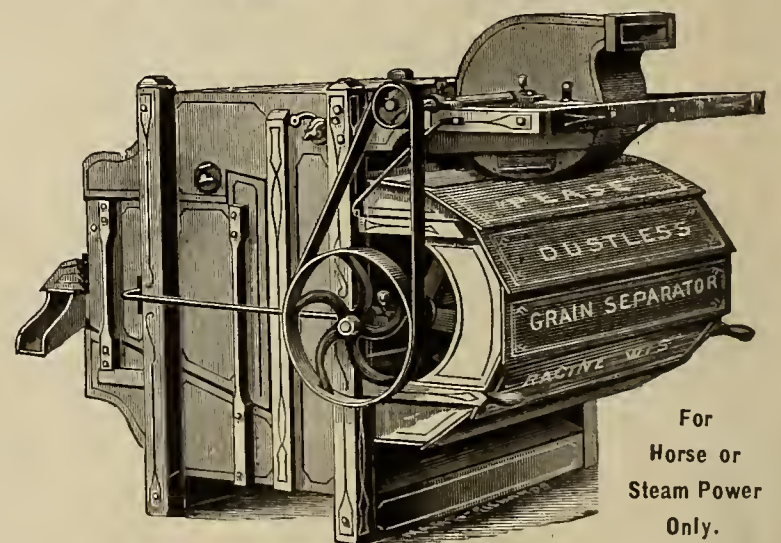
These mills are famous as corn and oat cleaners, where plain elevator work is required, and to be done rapidly.

The sieves are so arranged that they may be put in place or taken out independently, thus enabling the operator to quickly arrange any combination that may be required for the various kinds or conditions of grain to be cleaned.

Extreme height.	Size over all.	Floor to center of pulley.	Driving pulleys.	Rev. per minute.	Size of sieves.	Capacity per hour on corn or oats.	Weight.
4 ft. 1 in.	5 ft 6 in x 6 ft.	2 ft. 3 in.	6 in x 2 in	140	57 in. x 26 in.	800 to 1,000 bu.	425 lbs.

WE
ARE
HEADQUARTERS
FOR
ALL KINDS
OF
MOTIVE POWER
MACHINERY,
FITTINGS,
SUPPLIES AND
REPAIRS
FOR
GRAIN
ELEVATORS,
AND
MILLS.
—O—
SEND FOR
GENERAL
CATALOGUE
AND PRICES
—TO—

The "Pease" Dustless Separators.



For
Horse or
Steam Power
Only.

CHICAGO, ILL., April 8, 1891.

GENTLEMEN:—The "Pease" Dustless Separator 1 bought of you March 26, 1891, 1 sold to Wittman & Co., 66 and 68 N. Halsted St. The No. 00 Machine 1 bought of you January 19, 1891, I sold to F. Grimsell, 80 W. Erie St., and one I bought of you some time ago I sold to Keimier Bros., North Ave. and Halsted St. These and several others of these "Pease" Dustless Separators I have bought of you are being used chiefly for cleaning corn and oats, and any of them will clean as fast as 8x5-inch buckets, placed 12 inches apart and running at the usual speed, can elevate.

All the machines are giving good satisfaction.

Yours, etc.,

R. D. HILDRETH, Millwright,
53 and 55 So. Jefferson St.

SPIRIT LAKE, IOWA, May, 7, 1891.

GENTLEMEN:—Inclosed find draft to pay for the No. 00 "Pease" Dustless Separator just received from you to take the place of the — Separator. Day before yesterday we put the mill in place, and have been running it on some odd jobs, and the Separator works to our entire satisfaction. The Dustless Fan and Conductor works splendidly, carrying out everything I want it to, and I can put the suction on strong enough to take out grain if I desired. I can regulate the machine just as I want to, and am just more than pleased with it. Yours truly,

D. L. RILEY.

	No. 3.	No. 2.	No. 1.	No. 0.	No. 00.
Extreme Height.....	5 ft. 2 in.	5 ft. 2 in.	5 ft. 2 in.	5 ft. 3 in.	5 ft. 7 in.
Size over all.....	5 ft 9 in. x 3 ft 5 in.	5 ft 9 in. x 4 ft 5 in.	5 ft 9 in. x 5 ft 5 in.	5 ft 9 in. x 6 ft 5 in.	5 ft 9 in. x 9 ft 5 in.
Height to where grain enters.....	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.	4 ft. 3 in.
Floor to center of pulley.....	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.	2 ft. 3 in.
Driving pulleys.....	6 in. x 3 in.	6 in. x 3 in.	6 in. x 3 in.	6 in. x 4 in.	6 in. x 4 in.
Revolutions per minute.....	450	450	450	450	450
Size of hurdles.....	2 ft. 6 in. x 30 in.	3 ft. 2 in. x 30 in.	4 ft. x 30 in.	5 ft. x 30 in.	6 ft. x 30 in.
Capacity per hour.....	125 to 250 bu	150 to 300 bu	200 to 400 bu	250 to 400 bu	300 to 600 bu

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 389, 391, 392, 393.

THE MOST SUCCESSFUL FLAX CLEANERS IN THE WORLD!

FLAX,
TIMOTHY AND CLOVER
CLEANING.

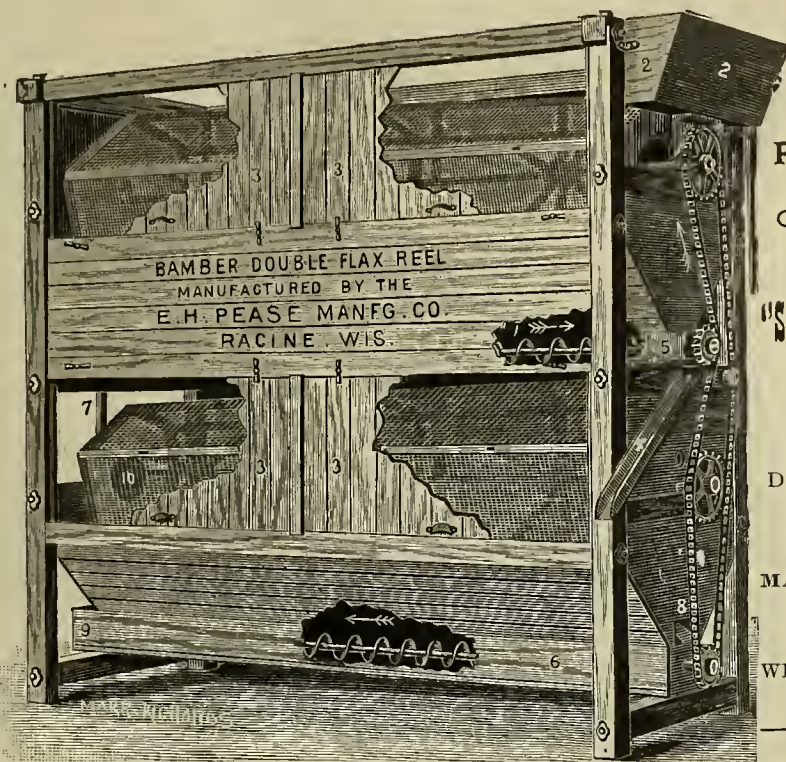
Dear Sirs:—We are using one of your No. 2 EXCELSIOR Dustless Elevator Separators (see page 317 of this paper) as a "scalper" for Flax, and easily run 750 bushels per hour through it. Much of the flax is thus reduced below six per cent. and run directly to our shipping bins. We also have one of your QUADRUPLE Flax Reeling Machines with which we clean rough flax down to two and one-half per cent. at the rate of 300 bushels per hour. We always overcrowd the reels so as to increase their capacity and thus run some flax into the "tailings" which we reclean at our leisure. Of course we should not waste any flax into the tailings and would reduce the flax to better per cent. if we did not crowd the "Feed" on our reels so hard. **We consider the outfit hard to beat.** We also use the Separator to scalp timothy and clover, thereby DOUBLING the capacity of our seed cleaners.

Yours truly,

W. B. CLISBY, Foreman,
W. W. CARGILL & BROS.,
Elevator "B"

LA CROSSE, WIS.,
Aug. 31, 1891.

STRAIGHT OR TAPERED
HAND REELS OF ANY DIMENSIONS
DESIRED. MADE TO ORDER.



MADE
WITH
ONE,
TWO or
FOUR
REELS
IN A
CHEST
AND
with or without
"SCALPING-SHOE"
REELS
OF ANY
DESIRED STYLE
OR
DIMENSIONS
MADE TO ORDER.
WRITE FOR
PARTICULARS.

Two feet of capacity length for each lineal foot of machine.

Tapered, Hexagon Reels. Revolving on Horizontal Shafts.

All Sprocket Wheels and Drive Chain run perpendicular and parallel with each other.

The lightest running, best made, most durable reels in the market.

Can "Clothe" them with { "BLACK" OR "TINNED" WIRE-CLOTH,
PERFORATED ZINC, OR
PERFORATED SHEET STEEL.

HOW IS THIS?

A FIVE YEARS' RECORD!

MINNEAPOLIS, MINN., Nov. 28, '91.

GENTLEMEN:—The QUADRUPLE FLAX REELING MACHINE you shipped us here for ELEVATOR "K" belonging to E. P. Bacon of Milwaukee has been running in good shape a month, and is giving perfect satisfaction.

We also have one of your machines of same style and size that has been running in this cleaning house about five years, which we like equally as well.

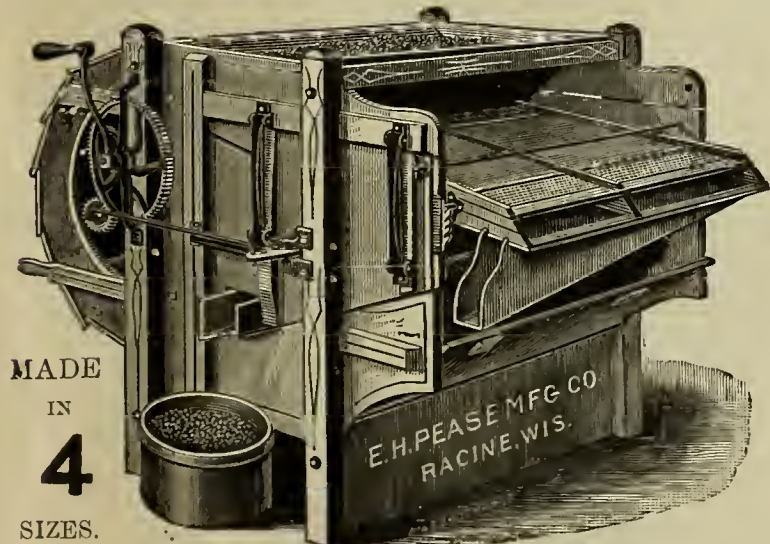
With either machine, WE CLEAN ROUGH FLAX DOWN TO ONE PER CENT. at the rate of 175 BUSHEL PER HOUR.

Have never seen another as perfect machine for RAPID AND PERFECT FLAX CLEANING. It is a pleasure to recommend your machines, as they are perfect and require little power or attention.

Yours truly,

E. G. TERWILLIGER,
Supt. Elevator "K."

OUR "PEASE" SPECIAL FLAX MILLS
—ARE—
FAMOUS FLAX CLEANERS
FOR SEED FLAX, OR COMMERCIAL CLEANING.
FOR COUNTRY GRAIN HOUSES.



MADE
IN
4
SIZES.

FOR HAND USE OR POWER.

This mill is represented with a Grain Hurdle in the Shoe, to show that although especially adapted to Flax Seed Cleaning, it can also be used for all kinds of Grain, making it a universal mill, calculated for all kinds of work. This mill is built upon the same principle as our Side Shake Warehouse Mills, but with more depth of the shoe, in order to accommodate deeper sieves, and a flax screen extending to the extreme front of the mill, a length of four feet. It consequently has greater capacity than any ordinary mill in existence. No flax hurdles are used, as separate sieves work better on flax seed, and afford opportunities for changing the combinations for different classes of work. This mill is equally well adapted to cleaning, separating and screening Timothy, Clover, and other fine seeds.

LOOK HERE!

THIS IS ONLY A PARTIAL LIST OF

LARGE FLAX HANDLERS

WHO HAVE ADOPTED AND ARE EACH

USING FROM ONE TO SIX OF OUR FLAX REELING MACHINES,

—VIZ:—

ALBERT DICKINSON SEED CO.,
MINNESOTA ELE. CO., (Armour & Co.),
CHAS. COUNSELMAN & CO.,
W. L. LUCE (South Elmhurst Elevator,)

CHICAGO.

E. P. BACON & CO., MILWAUKEE.

MINNEAPOLIS:

INTER-STATE GRAIN CO.
E. P. BACON, ELEVATOR "K".
STRONG & MILLER.
EMPIRE ELEVATOR CO.
BAGLEY ELEVATOR "X".

WINONA MILL CO., Mankato, Minn.
NESS & MOEN, Peterson, Minn.
CARGILL & BRO., La Crosse, Wis.
INTER-STATE GRAIN CO., Oelwein, Iowa.
SAMUELSON & CO., Stromsburg, Neb.
STOKES BROS., Watertown, S. Dak.
J. C. SANBORN & SON, Ortonville, Minn.
W. H. STIPP, State Center, Iowa.
CLARK BROS. & CO., Manson, Iowa.
GRAY, BABCOCK & SEARS, Ida Grove, Iowa.
S. J. CLAUSEN, Clear Lake, Iowa.
BOOR & BENJAMIN, Ashton, Iowa.
THOS. KOLTIS & CO., Radcliffe, Iowa.
D. C. FAIRBANKS, Dodge Center, Minn.
BARLOW & LAWRENCE, Thornton, Iowa.
J. E. KNUDSON, Mason City, Iowa.
MITCHELL BROS., Manley, Iowa.

AND MANY OTHERS.

E. H. PEASE MFG. CO., RACINE, WIS., U. S. A.

SEE PAGES 389, 390, 392, 393.

THE MOST SUCCESSFUL

MOTIVE POWER EVER INVENTED

FOR

COUNTRY GRAIN ELEVATORS

HERE YOU HAVE IT
IN A "NUTSHELL".

E. H. Pease Mfg. Co.

DEAR SIR:—We have given The Seven Complete Outfits (7 Morton Powers and 7 outfits of Elevating Machinery), bought of you this season, a six weeks' trial and find them all perfectly satisfactory. I consider the Morton Tread Power superior to any other in use. We have taken in at a single house as high as 3,750 bushels per day and used two 900 lb. horses to do the work, and at the same time loaded out 6 large car loads.

Yours truly,
WINONA MILL CO.,
Per W. F. PARKER,
Auditor and Builder.

WINONA, MINN., Oct. 24, 1891.

Above Company now (4-8-92) have 9 of these Powers.

WE ARE . . .

SOLE
GENERAL AGENTS

FOR
THESE POWERS

AND
HAVE PLACED STOCKS

FOR

Prompt Shipment

AT

RACINE, WIS.,
MINNEAPOLIS,
COUNCIL BLUFFS,
KANSAS CITY,
MUSKEGON, MICH.

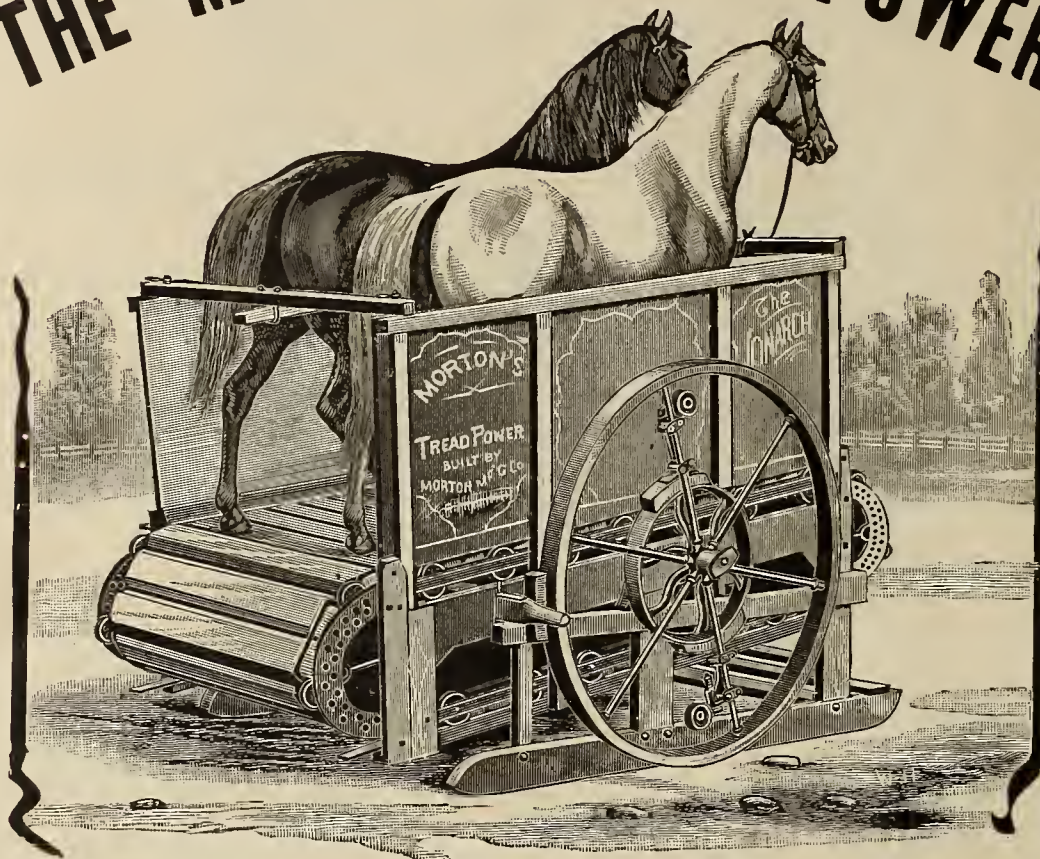
ADDRESS

ALL LETTERS AND ORDERS
TO

E. H. PEASE MFG. CO., Racine, Wis., UNITED STATES.

SEE PAGES 389, 390, 391 and 393.

THE MORTON TREAD POWER



DESIGNED EXPRESSLY FOR GRAIN ELEVATORS.

Style No. 3. For 1, 2 and 3 Horses.

Speed of Main Shaft, 90 to 100 per Minute.

For houses where not more than one, two or three horse power is required, these powers are beyond controversy more economical and satisfactory motors for grain elevators than any steam or gas engine or other horse powers in the world.

THEY ARE THE MOST SUCCESSFUL
BECAUSE

THEY ARE WARRANTED to give as steady motion to the grain elevating machinery, or to grain cleaning machinery as any steam or gas engine of same rated horse power.

They are always ready for business at a moment's notice. There is no fire to build; no steam to get up; no engineer or driver required; no dangers from combustible fuels of any kind; no increased insurance rates; no fire risks.

Our Patent Automatic Governor is furnished with every Morton Power sold without extra charge, and can be regulated to run the power slower or faster in a moment's time. Should a belt "fly off" when power is operating at full speed and work, there will be no change of speed and no damage to power or horses.

IT IS THE ONLY POWER

having an adjustable "elevation" (on which the horses walk) which is an important point of superiority, viz: By the mere turning of a crank, the operator can, at will, give more or less "pitch" to the elevation, thereby developing more or less power as work in hand requires, or lower same to a horizontal position to rest or feed the horses. This can be done when the horses are either on or off the power, without in any way effecting the "line" or the tension of the drive belt. It is the only Tread Power whose revolving platform (on which the horses walk) has a genuine cog-gear driving connection, with gears on either end of drive shaft, the "cogs" of which each consist of an anti-friction (and anti-wear) roller. It is the only Power having self-oiling traverse wheels and has 50 per cent. less traverse wheels and other wearing points, than any other tread power, and consequently is the most free, light running and steady Horse-Power in the market.

This machine needs no attention (except occasional oiling), and can be stopped or started by a rope, having one end connected with brake-lever, and other end at most convenient place in office or grain elevator. The entire expense of this power when delivered, set up, connected and covered with suitable building, will not cost the purchaser any more than the cheapest "Sweep" Power.

HERE YOU ARE AGAIN!

E. H. Pease Mfg. Co.

DEAR SIR:—I am using a Morton Tread Power, Style No. 3, Two-Horse, bought of you a year ago, and am running my stand of elevators which is 34 ft. high, with 5x8 in. buckets, placed 12 in. apart on link-belt, with a 1,050 lb. horse and it has given me better satisfaction than I expected when I bought it. I can do more work than any claim the manufacturers have ever made for it. I can elevate 740 bushels of oats, or 500 bushels corn per hour, with one horse.

Yours truly,
J. W. STROMBERG.

ROSCOE, IA., Oct. 26, 1891.

HERE IS A PARTIAL
LIST OF

Recent Purchasers

FOR REFERENCE.

Winona Mill Co., Winona, Minn.,
(9 machines).

M. D. Stevers & Co., Chicago.

C. W. McNoun, Burrton, Kan.
Barnard & Leas Mfg. Co., Moline, Ill.

Frost Mfg. Co., (many Powers),
Galesburg, Ill.

Russell & Miller, Winneconne, Wis.

O. L. Marfield & Co., (many Powers),
Winona, Minn.

Porter Milling Co., Winona, Minn.

Bingham Bros., (many Powers),
New Ulm, Minn.

A. McMichael, Bryant, So. Dak.

A. F. Bornschein, Braudon, Wis.

P. H. White, Credit River, Minn.

B. F. Uplinger, Kingstou, Ill.

York Foundry and Eng. Co.,
York, Neb., (many Powers).

J. A. Campbell & Son, Lincoln, Neb.

Geo. Zion, Yarmouth, Ia.

E. Burt, Shannou, Ill.

A. Thorp, Flagg, Ill.

Turner & Brenner, Marshall, Minn.

Fawcett Bros., Tacoma, Wash.

Peterson & Smith, Olds, Ia.

J. A. Carton & Co., Ackley, Ia.

McLaughlin & Son, Austin, Minn.

L. H. Neff, Groton, So. Dak.

Bender Bros. & Co., Spencer, Ia.

Logan & Sleeper, Sheldon, Ia.

S. Walters, Bruce, So. Dak.

AND
HUNDREDS
MORE.

SOLE AGENTS
FOR THE

UNITED STATES.

WE ARE HEADQUARTERS

For all kinds of **MACHINERY** and **SUPPLIES**
FOR POWER TRANSMISSION, GRAIN ELEVATING AND GRAIN CLEANING,

— FOR —
Grain Elevators and Mills,

SUCH AS
SHAFTING, PULLEYS, HANGERS,
PILLOW-BLOCKS, CLUTCHES, COUPLINGS,
GEARS, SPROCKETS, SET COLLARS,
TAKE-UP BOXES, CRANE-SPOUTS,
LEATHER, RUBBER, COTTON AND LINK BELTING,
"FLEXIBLE" AND "SWIVEL" GRAIN SPOUTS,
ELEVATOR BOOTS, BUCKETS AND BOLTS,
"SPIRAL" AND "BELT" CONVEYORS,
"PLATFORM," "DUMP" AND "HOPPER" SCALES,
GRAIN SCOOPS AND POWER GRAIN SHOVELS.

— ALL SIZES OF —
Farm and Warehouse Fanning Mills,
GRAIN TESTERS, SEED TESTERS,
PERFORATED METALS, WIRE CLOTH,
Power Car Pullers, Oat Clippers, Dustless
Receiving Separators,
POLISHERS, SEPARATORS, GRADERS,
CORN SHELLERS, STEAM ENGINES, FLAX REELS
AND SPECIAL FLAX MILLS, "OVERHEAD,"
"SWEEP" AND "TREAD" HORSE-POWERS,
BAG-TRUCKS, SIX-WHEEL WAREHOUSE TRUCKS, ETC.

GAS
ENGINES
OR
STEAM

Capacity, 50 bushels per hour.

GRAIN TESTER.

E. H. PEASE MFG. CO. RACINE, WIS.

CHICAGO-ENG-CO.

HERCULES
STEEL SCOOP
PAT. D. SEPT. 28th 1881.

Grain and Seed Testing Scale.

If you don't
SEE WHAT YOU
WANT,
ASK FOR IT.
We have got it.

GRAIN AND SEED TESTER.

E. H. PEASE MFG. CO.,
RACINE, WIS.

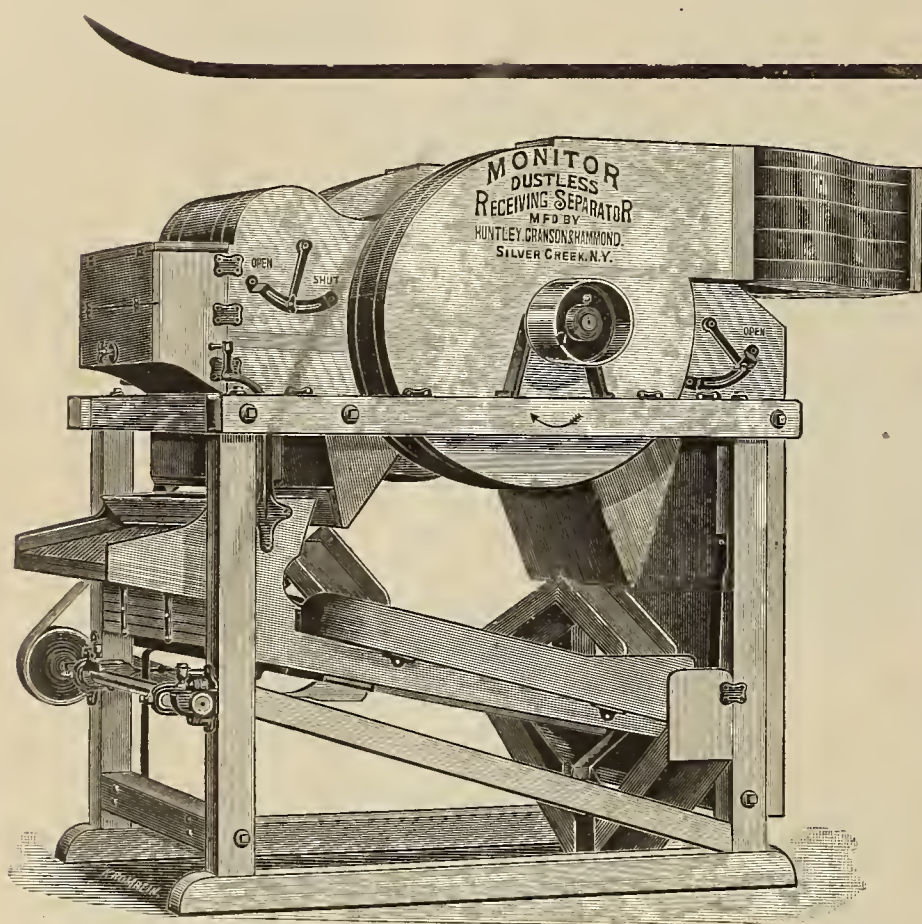
SEE PAGES 389, 390, 391 and 392.

SAFEST,
MOST DURABLE
— AND —
Powerful Puller
ON EARTH.

HANDLES
15 to 20 Loaded
Cars at once on
STRAIGHT
and LEVEL
TRACK
and pro-rata on
GRADES
and
CURVES

"HERCULES" POWER CAR PULLER.





The
Monitor
Separators
have
earned
high
reputation
for
efficiency
of
operation,
for
reliable
capacity,
for
durability
of
construction.
Evidence
of
their
superiority
cheerfully
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by

WESTERN BRANCH:
Corn Exchange,
MINNEAPOLIS, - MINN.

A. F. SHULER, Manager.

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HUNTLEY, CRANSON & HAMMOND,

Sole Manufacturers,

SILVER CREEK, N. Y.



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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Vol. X.

CHICAGO, ILLINOIS, JUNE 15, 1892.

No. 12.

SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM.

NEW ELEVATOR AT HARTFORD, MICH.

Comparatively a few years ago the grain and products of this county could be trundled to market fifteen and twenty miles away without serious inconvenience, as a limited storage and a few wagon loads could do the entire business. But this is all changed. Acre after acre has been transformed from forest and swamp into broad fields. The problem of handling and marketing the surplus grain of this part of the state was not given serious thought until transportation facilities to the great market centers were established. Then buyers, in a small way, with little or no capital and less storage, developed, but were often untrustworthy and unreliable. All this changed with increasing business and reliable dealers, financially responsible, providing greater storage facilities superseded the "one horse" affairs in vogue.

In no place in the county has a more radical change taken place than in the village of Hartford and in no place have business men shown more enterprise, energy and push than the firm of H. M. Olney & Co., the personnel of which is Horace M. Olney and Edward Finley; both lifelong residents of that place, and both well-known, thorough, business men.

Feeling for a long time their inadequate facilities for storing and handling the constantly increasing grain supply, early in the spring of 1891 they decided on the erection of a new elevator, sparing neither skill nor expense in making it modern in all respects. The site was admirably located just east of the track of the C. & W. M. R'y, of easy access to both railroad and wagons. Ground was broken in June and slowly, steadily but surely the structure illustrated herewith assumed proportions and was completed in time to receive the season's crop.

The main building is 40x70 feet in size, standing on a solid stone wall, eight feet high, giving a basement room of good proportions under the entire building. The first, or main floor, stands about five feet above the ground

elevation and is 12 feet high in the clear, the room having a lighter and more cheerful appearance than generally attains to rooms of this sort. The size of the timbers and mode of construction indicate the enormous weight that may be borne in the 22 grain bins directly over this floor. Each bin has a capacity of about 1,800 bushels, giving storage room above the first floor for 40,000 bushels of grain. Above these bins, which are 22 feet high, is

that the entire outside of the building is of steel and iron.

In addition to the main building, connecting thereto on the north end is an office and engine room 25x40 feet, constructed of brick with steel roof, all finished in keeping with the main building. The interior of the office is conveniently arranged and is elegantly finished with sassafras wood. The furnishing of the office is in good taste with its finish. In addition to the private desk of the

proprietors, ample and convenient desk room is provided for the business and patrons. The carpet, mantels, coal grate and other fixtures correspond with their surroundings and evince good taste in their selection. One of the most notable fixtures to the office, but not the least requisite, is the large and latest approved fire and burglar proof, time lock safe, the weight of which is two tons and which is complete in every particular.

Connected with the office and main building is the engine room, large, airy and comfortable, which also contains a modern wardrobe, wash fixtures, and cases for filing away papers and records for preservation. The engine in this room is a "Charter Gas Engine," of 10-horse power, made by the Charter Gas Engine Company of Sterling, Ill., not all of that power being required for running the entire machinery connected with the building. The motive power of the engine is derived from gasoline, requiring no wood or coal. It is absolutely safe, runs smoothly and is easily understood and handled.

Grain is received from farm-

ers' wagons by an easy, covered driveway to a level with the main floor, where it is emptied into large hoppers, the weighing facilities being open, accurate and handy. The elevating capacity is over 1,000 bushels per hour. In addition to the weighing scales for each hopper, the proprietors have placed near the center of the main floor one of the finest set of platform scales manufactured, their capacity being from two pounds to 3,000 pounds and so accurate that an atom will turn the balance.

The material that enters into this model and well-appointed elevator may be of interest to our readers.



NEW ELEVATOR AT HARTFORD, MICH.

the roof extension, where light and ventilation are obtained, making the distance from ground elevation to peak 57 feet.

The construction of the building above first floor is with 2x4 and 2x6 hemlock timber, sized and laid flatwise, the grain bins being made from the same, all breaking joints and interlocking at the corners and all securely spiked with 20-penny nails. Bulging or spreading of the bins or building is utterly impossible. The exterior is covered with corrugated iron, making it practically fire-proof. The roof is a truss pattern, covered with steel, so

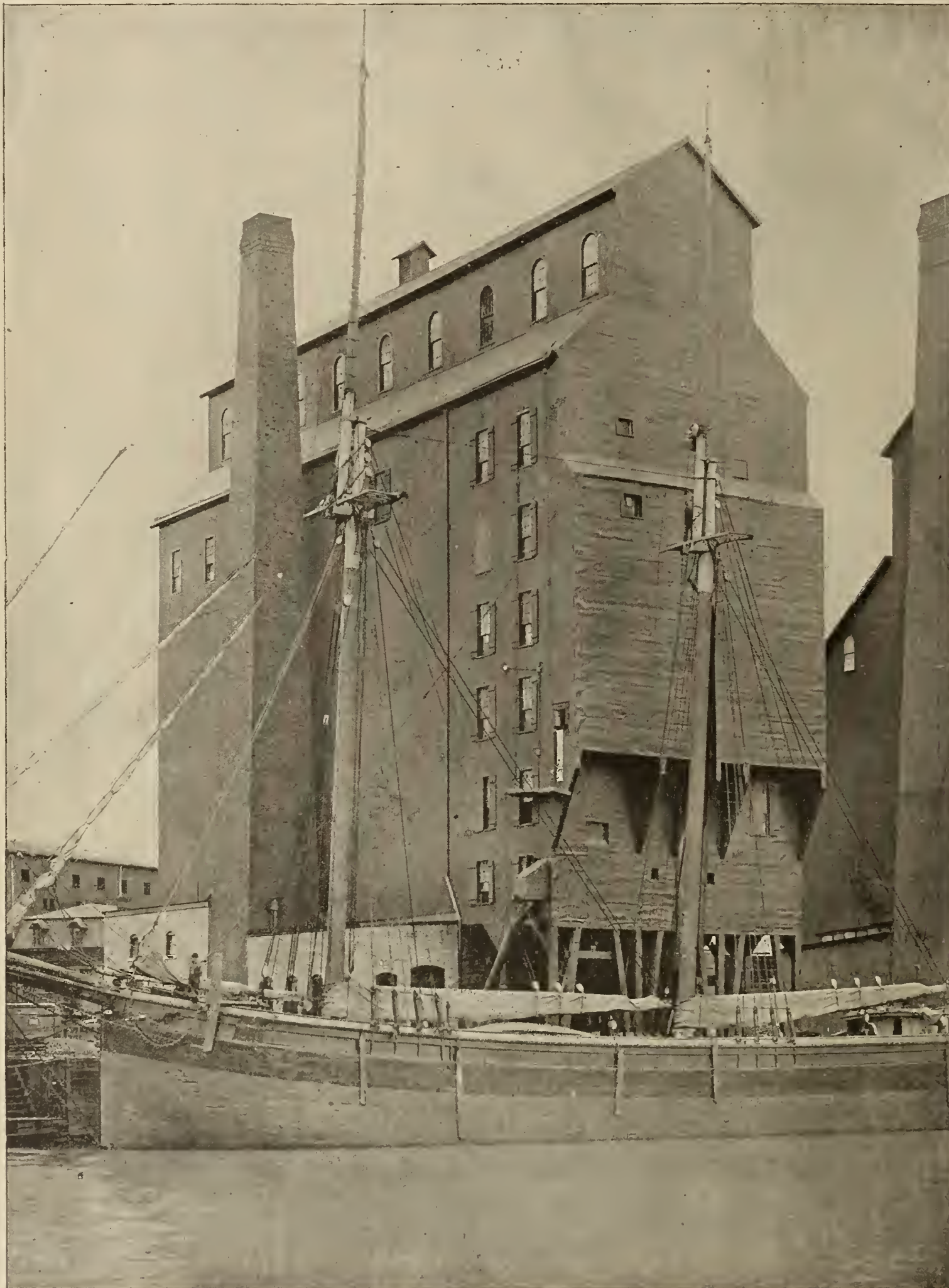
There are 30 cords of stone; 23,000 brick; 56 barrels of quick lime; 46 barrels cement; 180,000 feet of timber and lumber and 7,200 pounds of nails. The "squares" of steel and iron on roof and sides can be easily estimated. It took 700 days' labor to put it together after the material was on the ground. By careful management the cost of the building was kept within the first estimate of cost. Messrs. Olney & Co. deal in all kinds of grain and

Business men will not be slow to appreciate this fact.—*Advance, Bangor, Mich.*

"UNION ELEVATOR" AT BUFFALO, N. Y.

The cut represents the new "Union Elevator" at Buffalo, N. Y., now owned and operated by the Delaware, Lack-

and substantial improvement. The first story is of stone, the whole resting on a pile foundation. The car delivery is fitted with a self-loading and trimming device, so that a car can be loaded every three minutes. It has direct communication with the D., L. & W. R. R. Co., and is on one of the best situations on Buffalo River, being the first elevator at the mouth of the harbor. This elevator has double gangs of men and is run night and day.



"UNION ELEVATOR" AT BUFFALO, N. Y.

seeds. The territory centering at their place is large and productive and the supply is constantly increasing. Their enlarged facilities will now enable them to handle with ease all that comes to them. The urbane manner in which they meet their patrons and customers, gives pleasure to business and their financial standing and fairness leaves no room for dissatisfaction. Their enterprise has given Hartford a lasting business on a solid basis, which will benefit every one interested in the village.

awana & Western R. R. Co., which has just been thoroughly overhauled and modernized, an addition having been built after plans made by R. Dunbar & Son, the grain elevator architects, engineers and contractors, doubling the capacity of the house.

The elevator is so arranged as to unload from vessels, deliver to cars and canal boats all at the same time. New engine and boiler houses have been added and the engine room with its clean tile floor and white walls is a fine

Ground was broken the 15th day of February and the entire work was completed in 52 working days, under Mr. E. Brown, mechanical superintendent for R. Dunbar & Son. The dryer and cooler which formerly occupied the site of the present addition was removed. The excellent cut given herewith first appeared in the *Buffalo Express*.

Arkansas farmers suffered a loss of \$2,500,000 worth of corn by the late floods.

TRANSFERRING GRAIN AT TERMINALS.

Few if any terminal grain markets have sufficient and satisfactory facilities for transferring grain from car to car. All are far behind the times in this matter, but some manage to struggle along without much inconvenience to the trade. The cause for the delay in adopting modern facilities for transferring grain is probably the reluctance of railroad companies to expend a cent for improving their grain handling facilities. At railway terminals where much grain is shipped through, the railway companies prefer to have the grain shoveled from car to car rather than expend a few thousand dollars in the erection of a good grain transfer elevator. The latter course is much cheaper for them in the long run, but would necessitate a larger expenditure at the start.

On grain hilled through the charge for transfer is absorbed by the carriers, and they seem to be satisfied with the shovel service although they are able to transfer it at no place for less than one dollar per car, and at one point it costs two dollars to transfer from car to car by shoveling. The grain that is stolen, spilled and blown away while being transferred the railroad officials look upon as the shipper's loss only. They forget that every 100 pounds of grain thus taken from their cars bound for the seaboard, reduces their net earnings $22\frac{1}{2}$ cents. Few carloads are thus transferred without a loss of from 100 to 300 pounds and often the loss is greater.

When grain is sent to a storage elevator for transfer it is usually docked for future shrinkage just as if it were to be placed in store.

Chicago public elevator men publish no rate for transferring, but charge $\frac{3}{4}$ of one cent for first 10 days' storage. The Buffalo pool receives no grain for transfer and charges $\frac{3}{8}$ of one cent for the first 10 days' storage or part thereof.

At some points the charge made at storage elevators for transferring grain is less than the Chicago rate, and at

other points it is more. As it would cost \$4.50 to transfer 600 bushels at the Chicago rate, and from one dollar to two dollars to have it shoveled from car to car, it is evident that railroad officials would not have much transferred by the storage elevators when their company would have to pay for it. A traffic manager of one of Chicago's roads has repeatedly refused to allow a reliable firm to erect a transfer elevator along its right of way and transfer all grain for 70 cents a car. He sends it to a storage elevator for transfer and this company no doubt has to pay several times 70 cents.

Even in Chicago where we would expect to find all roads equipped with the best facilities for transferring grain, one road is still transferring from car to car on the level, by which more grain is lost to the shipper than any other method. This ancient method is also in use at other points as will be learned by perusing the remarks of gentlemen connected with the grain trade of other cities given below.

The high and low track, illustrated herewith, another relic of a forgotten age, is also used at a number of points and even at Chicago several roads use this shiftless arrangement for transferring grain. As with the track on the level it is generally more expensive to the shipper than to the carrier.

It is the duty of the receiver's associations at the different terminals to do everything in their power to induce railroad companies to erect regular transfer elevators with the scales upon the ground floor and erected upon a stone foundation. By such a house grain can be cheaply and quickly transferred without loss of grain, and correct weights can be obtained. As receivers lack persistence the shippers can do much toward bringing about a change by lending their influence in behalf of modern transfer facilities, the adoption of which would redound more to their interests than to the interests of any others connected with the grain trade.

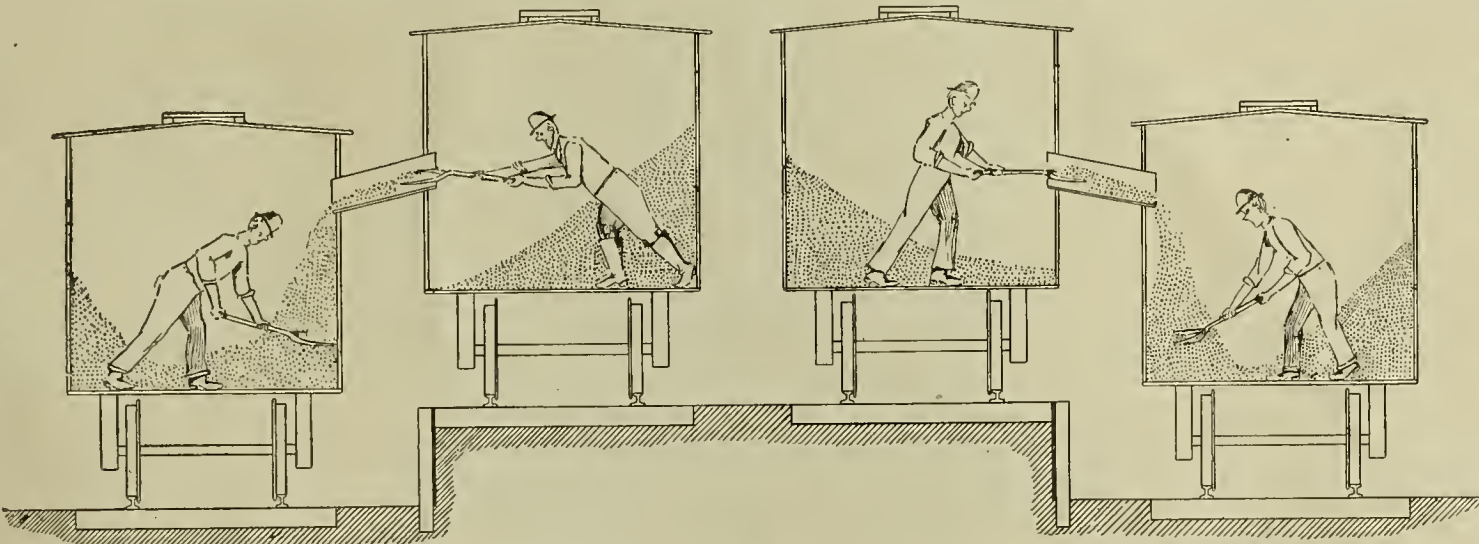
In reply to queries we have received letters regarding the transfer facilities at other points as follows:

JOHN SHELY, Chief Deputy Inspector of Grain at Minneapolis, writes "That the Minneapolis inspection district contains twenty-eight elevators of all sizes. Each house has a state weighman. Any of the elevators will transfer grain for three-fourths of a cent per bushel. There is no other way of transferring grain at this point. The facilities for transferring are sufficient for all demands and satisfactory to the grain trade."

W. W. HASKELL, Kansas State Grain Inspector, at Kansas City, Kan., says "There are practically no facilities for transferring grain at this point except through the elevators. Some shoveling is done on level track, but most of the grain received here goes to the elevators or is forwarded in the original cars. I have not heard many comments on the transferring of grain and do not know whether the present facilities are satisfactory or not."

C. B. MURRAY, Superintendent of the Cincinnati Chamber of Commerce, writes that "There are two regular transfer grain elevators. There is one 'Jumbo' transfer equipment. There is something done, at times, in transfer by shoveling—mostly on level tracks. The question as to whether the present facilities are sufficient to meet the demands of the trade is an open one—and debatable. The trade manages to take good care, in some way, of the business offering. Quite likely there is room for improvement. As to objections being made to the existing service there is nothing peculiar in such objections, if they arise."

PAYSON HUTCHINS, Chief Inspector of Grain at Detroit,



TRANSFERRING GRAIN AT TERMINALS.

writes, "We have no transfer elevators or Jumbo cars. There are four storage elevators through which transferring can be done at any time; also a high track at Delray, four miles from Detroit. The present facilities meet all demands. We have transferred considerable grain through the 'Wabash Elevator' the past winter; but the bulk of the work was done on the high track."

DAVID HORN, Dominion Grain Inspector at Winnipeg, writes, "There are no facilities in this city for transferring grain other than by shoveling from one car to another, on the level. The cost runs about \$2 per car. There is but little transferring done here, and there is but one small and inefficient storage elevator, and no Jumbo cars. The need for transferring being so limited, the meager facilities at command are but little questioned, nor do we think the present requirements of the trade sufficient to encourage any enterprise in this connection. There is, however, room for a good elevator for the receiving of grain to clean, sort and mix to grade for re-shipment."

WILLIAM THURSTONE, Secretary of the Buffalo Merchants' Exchange, writes, "Railroads transfer grain by shoveling from car to car. We have no regular grain transfer elevators. There are no Jumbo transfer cars as far as I can ascertain. Grain is not transferred by storage elevator to any extent. Grain is transferred by shoveling both from a high to a low track and on the level. The present facilities are inadequate to the demands of the trade. Objections usually made to present transfer services are: (1) No facilities for weighing. (2) We have much need for transfer facilities where grain can be weighed in process of transfer. Railroads have no transfer elevators of their own to do the work required of them. The above is a summary of the opinions of many of our grain men."

DENISON B. SMITH, Secretary of the Toledo Produce Exchange, writes, "We have no transfer elevators; but

our railroad elevators are arranged to elevate and spout to cars. A good deal of grain is transferred from one car to another standing side by side on track. We think the storage capacity sufficient at present."

GEO. H. MORGAN, Secretary of the Merchants' Exchange of St. Louis, writes, "We have no regular grain transfer elevators in St. Louis. Transfers are made through the regular elevators for one-half cent per bushel. This arrangement is satisfactory as far as I know. Some grain is transferred by shoveling from tracks on a level."

G. W. LYNN, Chief Inspector of Grain at Toledo, writes, "There are no regular transfer elevators here; all are storage, which can be used for transferring from car to car if necessary. The principal transferring is done from high to low track. The present facilities seem to meet the demands of the trade. There are no Jumbo cars here. I have heard no objection to our present transfer service."

CHAS. N. BELL, Secretary of the Winnipeg Grain and Produce Exchange, writes, "We have but one elevator in Winnipeg outside of the mill elevators, and that is used simply as a storage and cleaning warehouse. There is much interest taken just now in a proposal to establish large accumulating and storage elevators at this point."

T. L. CURRIE, Secretary of the Board of Grain Inspectors at St. Louis, writes, "We have no facilities for the transfer of grain except through the elevators or on track by shovels. Most of the transferring is done by the railroads direct from car to car by shovels. This does not fully meet the demand for prompt transfer when receipts are large. The main objection urged against the

present track system is that the grain cannot be weighed except on railroad track scales. We think a change in manner of transfer would meet with favor from the trade."

JUNIOUS S. SMITH, Weighmaster of the Buffalo Merchants' Exchange, writes, "I am sorry to say that while many of our elevators can and sometimes do transfer grain from one car to another,

we have no convenient and economical facilities for such transfer at or near the railroad yards, enabling us to give hopper scale weights of transferred grain without great expense; and, while large amounts of grain are transferred from high to low tracks and also on a level, these must be track scale weights and not entirely satisfactory. The facilities are inadequate for the business and a strong effort was recently made to establish a transfer elevator in some convenient location, to do the work rapidly, accurately and economically; but as far as I know the movement was not successful."

C. M. REESE, State Weighmaster at Minneapolis, writes, "We have twenty-four elevators in this city doing a transfer as well as storage business. We have no Jumbo transfer cars. All our elevators are storage elevators. To my knowledge no grain is transferred by shovel or otherwise from car to car on the tracks. I believe the present facilities are ample to accommodate the trade. I have heard no complaints about our system of transferring grain."

R. C. GRIER, Secretary of the Board of Trade of Peoria, writes, "Grain transferring here is through regular elevators; and there is a great deal of it done. The facilities are good and satisfactory to the trade and equal to the demands of our market. There is no track transferring and no Jumbo transfer car. We hear no objections to the service whatever. The facilities are abundant."

An appropriation of \$25,000 is proposed to enable the secretary of the Department of Agriculture to look into the matter of increasing the exports of farm products.

Adams-Griffin Company, Montgomery, Ala.: "The only fault we have to find with the AMERICAN ELEVATOR AND GRAIN TRADE is that it is a monthly instead of a weekly, as we would be glad to pay the difference in price."

ON SCALES.

BY OBSERVER.

Like mistakes, anecdotes will happen; but, unlike anecdotes, mistakes, especially in weighing grain, do not circulate unless there is a circulating medium behind them. Here is an anecdote and a mistake which circulated about thirty miles in two days:

A miller had had trouble with his weights. His grain in car lots from a certain elevator never held out, or at least that's what he said. Finally he put in a fine track scale. The first car thereafter—the very first car received from this "thieving elevator"—fell short. Seven men had seen it weighed on the new scale—seven worthy and solid citizens who had industriously watched the construction of the scale from the excavation to the consummation. The scale expert had just left on the last train but the seven solid and trustworthy citizens were there when this car was run onto the scale.

From the thieving elevator's office to the elevator is not a mile by about seven furlongs; yet this positive and exultant miller wore this statement about the seven citizens to tatters before he and his culprit (the grain clerk) reached the scale where the thieving had been done. "Now, then, Mr. Miller," began the grain clerk, "let me show you our system, and —"

"Don't care a d—n about your system," broke in the miller. "That car of wheat was fourteen bushels short and I want the wheat or the money." His voice was pitched very high on "wheat" and would have been higher still on "money," but we happened to be directly under the shipping bins and they were all full of wheat which weighed about sixty-two pounds to the bushel.

"Well, let us compare weights then. How much did you make the gross?"

"Forty-seven thousand four hundred and ninety, and there's the fingers."

By this time the grain clerk had found the entry in his shipping book and had seen at a glance where the trouble lay. "And you say," resumed the clerk quietly, "that seven men, etc. —"

"Yes, sir, I did."

"Well, I believe you, Mr. Miller. Here is our gross—47,450. Now then, Mr. Miller, how many of these seven—you said there were seven, I believe—how many of these gentlemen waited until this car had been unloaded and weighed empty?"

His voice wasn't much higher than his head when he replied that he didn't "know as any of 'em had seen the empty car weighed, but my man has weighed in a mill for fifteen years and I know he is reliable."

"But, Mr. Miller, the man who weighed this wheat out of our elevator has weighed right here year in and year out for nearly thirty years, and we know by this very system that you do not care a d—n for, that he makes mistakes. Now, you see, our tare is 20,780 while your man made it 21,760, a difference of nearly 1,000 pounds, and I'll prove to you in a few moments that your man made the error, and that, too, without the aid of the system that you do not want to know about. You see it is our custom to sandwich in our loading between our unloading so as to save switching of empty cars. Now, we will go to our unloading books and see if this car was not unloaded same day it was loaded for your mill." And we did. And it was so. And the miller looked puzzled. Finally he said: "Well, now, I loaded that same car with flour and shipped it in here yesterday and it must be—why, by thunder! there it is now, over there by that shed." And so it was. And the empty car was switched into the elevator and weighed once more and the miller was downed again.

Instead of taking the fourteen bushels or the money he took the train for home, a wiser and cooler man.

This little anecdote, true as gospel, points a moral. Points several of them in fact; and besides points several facts that are not particularly moral facts.

Moral 1. When circumstances appear to locate a mote in the other man's eye, give your own eye a thorough overhauling before you interview him. Moral 2. Keep cool. Do not be too positive. Wait till the evidence is all in and then if your evidence outweighs the other man's, be pleasant and polite but firm as a rock. You will get your wheat.

Now, for a fact or two. The figures your weighman writes down in his book are copied. A copy does not stand good in court or anywhere else unless it is proved

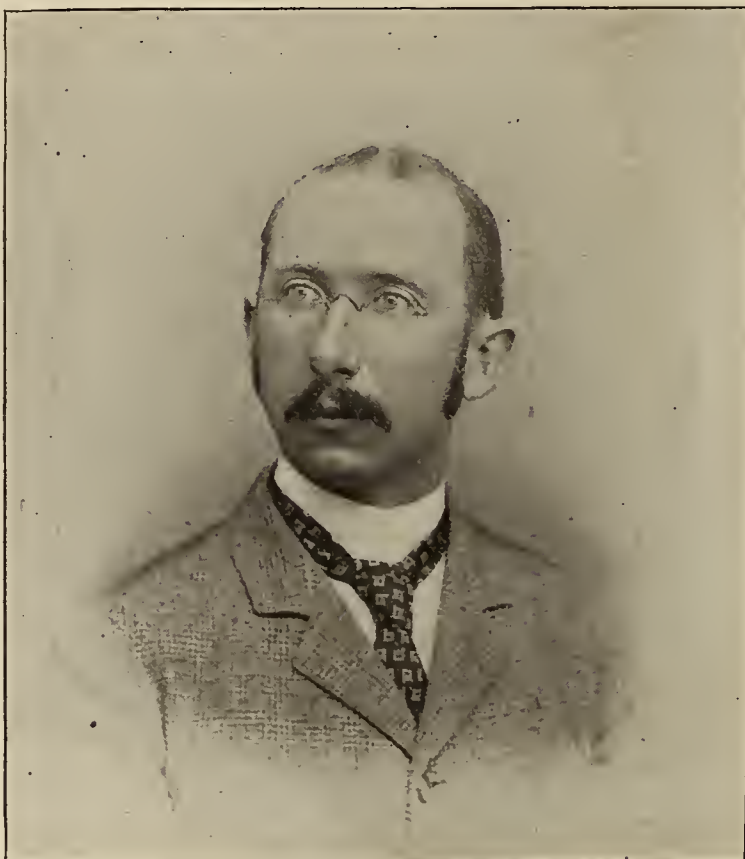
—attested. You may have the most reliable scale in the world, but if your copy of weights is not proved no one will care a fig for your reliable scale.

The figures in a weighman's tally book stand for money, and no small sum. Do you *know* they are correct? These same figures, reduced to money in your banker's accounts, are handled with the greatest care and a regular system employed to prove that they are correct. Now, then, if the bank's entries of money received should be proved by a system of checks and balances, much more should the elevator weighman's entries be so proved, because, in the bank, an error can be located by checking back, but if the elevator weighman makes an error what is there to check back to? Absolutely nothing. With this immense loophole in the elevator system is it any wonder that there are shortages?

A PHILADELPHIA GRAIN FIRM.

Philadelphia has many enterprising grain firms and prominent among them is the George E. Bartol Company, Limited. It was this firm that recently bought 50,000 bushels of corn at Chicago and had it shipped through to the seaboard in one train without change of engine or break in the train.

The firm was organized in 1888 and has succeeded in



GEORGE E. BARTOL.

building up a large and ever increasing trade. The members of the firm are Geo. E. Bartol, whose portrait is given herewith, Geo. H. Rogers and Charles E. Culpeper, who has been connected with the grain trade for nearly twenty years.

Mr. Bartol's father was a sugar merchant and refiner at Philadelphia and he too was connected with the business for a number of years. As has been shown repeatedly in our columns there is a general awakening among the members of the Philadelphia grain trade and the importing and exporting houses, and much credit is due to Mr. Bartol for his part in the work of bringing about the desired change.

The George E. Bartol Company does a heavy export business in grain and is a large receiver. It also exports large quantities of flour, starch and glucose.

Missouri farmers lost 500,000 acres of wheat and corn by the recent flood.

Eight grain stores and elevators were burned in Massachusetts last year and nineteen in the fourteen years preceding. The damage to buildings was \$94,716 for the fifteen years, and \$8,788 for last year, for which \$6,263 was paid as insurance. The damage to contents was \$12,320 last year and \$6,180 insurance was paid. One of the eight fires was a total loss, one was caused by exposure, one was started while the water pipes were being thawed, one was caused by rats and matches, one by locomotive sparks, one by an incendiary and three originated from unknown causes.

WHY MANITOBA ELEVATORS ARE FULL.

Parties who have recently returned from Winnipeg complain of the indiscriminate manner in which some of the banks there have distributed credits, which has had the effect of encouraging farmers to speculate with instead of realizing on their grain. The consequence is that the elevators in Manitoba are choked with wheat, upon which farmers cannot realize within 10 cents or 12 cents per bushel of the price they could have got last fall. These banks that advanced too liberally to farmers are now having an anxious time in collecting the margins due them on account of the drop in prices, and it is thought there will be a good deal of legal fighting before the farmers will refund any of the advances they have received on their grain. A case is related of a farmer west of Winnipeg, who refused 81 cents for his wheat, put it into elevator, got a warehouse receipt, took it to the bank, and received an advance upon it of 75 cents per bushel. Now, however, the most he can sell it for is 68 cents per bushel, and the bank of course has made a demand for the difference between what it advanced and what the grain will now bring after deducting storage and interest. But it turns out that the affairs of the farmer are in such shape that the bank cannot recover

anything, and we are informed that this is by no means an isolated case. It is affirmed by responsible parties here that such has been the competition for business between some of the banks in Manitoba that they have actually run after warehouse receipts of grain in their anxiety to make advances on them. This applies to grain stored in the interior as well as at Fort William, which indicates that the banking fraternity in Manitoba have been altogether too bullish in their ideas on the future of wheat. This condition of affairs is having a bad effect upon general business, and no improvement is looked for in the Northwest until the present standstill in the wheat trade is overcome and the stuff commences to move.—*Trade Bulletin, Montreal.*

CORN AND WHEAT IN MEXICO.

Indian corn or maize is the staple grain of Mexico and is produced in large quantities in nearly every state of the republic. It serves equally for the nourishment of men and animals, and is generally used by Mexicans as a bread in the form of a cake called the "torilla." The necessities of the people alone limit its production, the exports being inconsiderable. During a period of twelve years, from 1877 to 1888, the total value of maize exported was only \$255,000, an average of about \$11,250 per annum.

The production of wheat, which can only be successfully grown in the colder and in some parts of the temperate regions, is much less than that of maize. Although it is raised in smaller or greater quantities in all the states, with a few exceptions, the superior qualities, equal to the best European or American wheat, are only grown on the tablelands several thousand feet above the sea. An area of over 52,000 square miles, situated in the states of Michoacan, Jalisco, Guanajuato, Aguas Calientes, San Luis Potosi and Queretaro, is best adapted for the growth of the cereals. The possibilities of the wheat production are such that it could be made one of the leading exports by the application of the advanced systems of cultivation and modern implements.

A moderate estimate places the possible production of the area mentioned, cultivated to its fullest capacity, at 110,000,000 bushels wheat and 440,000,000 bushels corn per year, all of which could be made available for export; the balance of the land adapted for the purpose being sufficient to meet the demands of the home market.

A field of corn 208 feet square has been planted by a farmer named John Buckles in Pulaski county, Ill. He expects to get the greatest yield ever obtained in Illinois. The grains of corn are planted in 104 rows two feet apart, with 250 grains in each row, ten inches apart.

The plow, that time-honored implement of husbandry, is falling into disuse in North Dakota. After burning off the stubble the advanced practice of the farmers in that region is to run a disc harrow over the ground and put in the seed. Wheat succeeds best with this method of cultivation.

BANKS CARRYING FARMERS' WHEAT.

There is some complaint among the grain men, that the custom followed so freely by bankers in Manitoba of lending money to farmers, upon the security of wheat, is not fair to the grain shippers. Many farmers have adopted the custom of storing their wheat in the elevators, and borrowing money upon the warehouse receipt. We do not see that the grain men have much reason to complain of this custom, at least this year. If the grain dealers had bought the wheat which is held by the farmers, at the prices ruling last winter, they (the grain men) would have been the losers. As it is, the farmers who hold are the losers, for the value of the stuff now is away below the prices offered here last winter. Besides the loss from the decline in value, the farmers lose the interest on the borrowed money, cost of storage, insurance, etc. Altogether it is a very serious matter to those farmers who refused to sell at the very fair prices offered last fall and winter. If the grain men held the wheat they would be worse off than they now are. By holding in first hands, a portion of the losses of the season have been shifted upon the farmers.

No doubt the ability to obtain money upon warehouse receipts has a tendency to induce farmers to hold their grain, and this is not an advantage to the country at large, as a general rule. Still, the farmer has a right to hold his wheat if he feels disposed so to do, and a warehouse receipt is a legitimate document upon which to advance money, regardless of the holder of the document.

In the case of loans to farmers on wheat this year, the result is not likely to prove satisfactory to the banks. The amount advanced upon the wheat is greater in many cases than the present value of the stuff, owing to the decline in prices. The holders of the warehouse receipts will of course demand the full amount of the loans, that is, they will ask the farmer to refund the difference between the present value of the grain and the amount of the advance on the warehouse receipt, together with interest and storage charges. In some cases there may be difficulty in securing this refund from farmers who are unable or unwilling to pay up.—*Winnipeg Commercial*.

STORING FARMERS' GRAIN IN AUSTRALASIA.

It is not surprising to hear that Australasian farmers are no more contented with large merchants who buy or store their grain than are the farmers of Dakota with the "elevator men" of Minnesota, says *The Miller* of London. It does not appear that the northwestern elevator has made its appearance in Australia, but much the same mechanism for the distribution of grain which obtains in the United States and Canada is also found at the Antipodes. The farmers there are for the most part men of small capital, and are driven into the arms of middlemen, who either buy their grain from them or take into store for three, six or twelve months. There is no charge for storage, the only demand made upon the farmer being his proportion of the fire insurance by which the whole store is protected. The owner of the grain can take it away at any time he pleases if he does not care to accept the market rate which the storer professes himself at all times ready to pay. The grain is either stored in barns or large warehouses or in "up country" districts in stacks at railway stations. All things considered, the farmer hardly seems to be entitled to grumble, but he complains that he is the victim of a leonine bargain, that he is charged three times as much for insurance as the storer really pays, that the option conceded him of leaving or selling his wheat is illusory by means of a tacit agreement between the stores to keep prices at a level. Moreover the farmer appears to make a special grievance of the fact that once his wheat is taken into store its identity is lost, the covenant of the storer only extending to the return on demand of an equivalent amount of grain of the same quality. Any other arrangement would, under the circumstances, seem impracticable, but the farmer's grief is that the wheat which has matured in the warehouse or in stack increases sensibly in value, and that this increment falls entirely to the share of the storer. The latter would doubtless reply that he has earned this

increment by the capital and labor he has expended in storage, a service which the farmer has enjoyed free of direct charge. There is now a movement among the agriculturists of Victoria for the establishment of what are termed "farmers' co-operative barns," but it remains to be seen whether these "barns" will be more successful than the "farmers' elevators" of the Northwest.

INSECTS INJURIOUS TO STORED GRAIN.

BY H. E. WEED, M. S., OF THE MISSISSIPPI EXPERIMENT STATION.

The Black Weevil, *Calandra oryzae*, Linn, is probably a native of the East Indies where it is known as the "Rice Weevil," and for nearly a century has there been a well known pest. It is now, like most grain insects, cosmopolitan, being especially abundant in tropical climates. In the northern United States it is almost unknown, but in the south it is a serious pest.

The mature insect is shown at c in Fig. 5. It is about one-eighth of an inch long, black, with four light brown

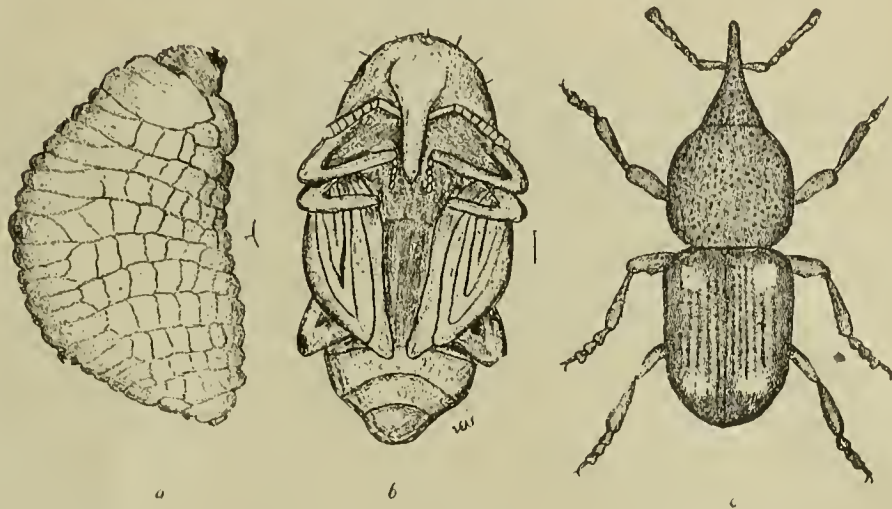


FIG 5

or reddish spots at the corners of the elytra or wing cases. The surface of the body is indented, and upon the elytra these indentations are arranged in rows. The mouth parts are at the end of a long snout and the antennae elbow from this snout as seen in the figure.

The eggs are quite small, elongate, and translucent. The larva is shown at a in Fig. 5 and when full grown is about one-eighth of an inch long. It is a footless grub with a white body and brown head. The body is nearly

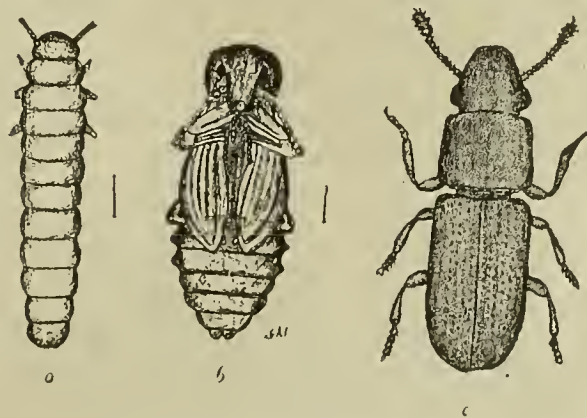


FIG 6

cylindrical, curved as shown in the figure, and along the back is broader than beneath.

The pupa is about the same length as the larva and is shown at b in Fig. 5. It is of a light color and the antennae, forelegs and wing cases are plainly visible, the posterior legs being partly folded beneath the wing cases.

This insect is found in the grain in the field, but does its greatest damage after the grain has been gathered. Although attacking other grains it injures corn more than any other and an ear attacked has nearly the same appearance as that shown last month in Fig. 2, where the attack was made by the Angoumois grain moth.

The females make punctures by means of their snouts in the kernels within which the eggs are laid, several being sometimes laid in one kernel. In a few days these eggs hatch and the young larvae feed upon the inner portion of the kernels and, when mature, the pupae are formed by a shedding of the larval skin. In about two weeks the mature weevils are produced and these, after pairing, lay eggs for another generation.

The length of time required for the change from the egg to imago varies from three weeks to two months or over, varying according to temperature. In a warm even

temperature the increase of the weevils is quite rapid, while cold weather greatly retards their growth. There are no distinct broods of these insects, although there are probably at least eight annual generations. The insect all stages of egg, larva, pupa, and imago can be found at all times in infested corn. The period of egg laying of a single female is quite long, sometimes several weeks.

The black weevils damage corn as much in the imago state as in the larval, as, not content with eating out the center of the kernels as larvae, the mature weevils eat into the kernels indiscriminately. Even greater damage is done by the weevils than by the larvae.

It is probable that the black weevils produce an injurious action upon the stomach when corn infested with them is fed to stock, and according to Riley cases are "on record where human beings have suffered, even unto death, from the use of flour made from wheat badly infested with the closely allied species (*granarius*), and the chitinous covering is not only indigestible, but must be very irritating also."

Mr. L. O. Howard has described a chalcid parasite upon this insect under the name of *Pteromalis calandreae* which closely resembles the *Pteromalis glaberrima*, shown in Fig. 5. It is not a common parasite however and has not yet been observed here.

The red grain beetle (*Silvanus cassoie*, Reiche.) is the small, flat, elongate, red beetle so common in stored grain in the South. Most of the members of the family Cucujidae, to which this beetle belongs, have their natural habitat under bark, although some species are found in various commercial products.

The imago is about one-tenth of an inch long with a flat body, slender legs, club shaped antennae, and of a reddish brown color. It is shown at c in Fig. 6, the line at the right showing the natural length.

The larva, shown at a in Fig. 6, is about one-tenth of an inch in length when full

grown, and is somewhat flattened. The body is of a light color, somewhat darker than the larva of the black weevil, and with a slight yellowish tinge. The head is brown and the legs, six in number, are pointed and darker than the body.

The pupa is about the same length as the larva and of the same color and is shown at b in Fig. 6. The club shaped antennae are folded between the fore and middle legs and are plainly visible.

The small white eggs are laid at the base of the kernels of corn and the larva hatching in a few days from these bore into the kernels at the soft portion near the base. Several larvae may enter the same kernel, it not being uncommon to find a half dozen in one seed.

When mature, or in about three weeks, the larvae form pupae within the seed from which the beetles escape in about two weeks. There are probably eight or ten annual generations of this beetle, and it is not so much affected by cold weather as is the black weevil.

In infested corn these beetles are seen upon the husk or at the base of the kernels. They are quite lively and when an ear of corn is husked they seek protection between the kernels. They are gathered with the corn in the autumn and increase quite rapidly after the corn is stored. The presence of the larvae within the kernels is not easily detected from external appearances, as they eat, as a rule, only the softer middle portion of the seed.

[To be Continued.]

ELEVATOR POOL AT NEW YORK HARBOR.

The grain elevator pool has been broken up within the past ten days by the cutting of the transfer rate on the part of the stationary elevators from $1\frac{1}{2}$ cents to $\frac{5}{8}$ cent and then to $\frac{3}{8}$ cent net, since the rates of ocean freights have fallen so low that only the regular line steamers are competing for new export business, and then do not go to store, which left the stationary elevators little to do, while the floaters have nearly the whole business on new account, and are maintaining rates.—*Daily Bulletin*, New York, June 4.

In April we imported 619 tons of flax, against 467 tons in April, 1891; and during the ten months ending with April we imported 5,900 tons, valued at \$1,510,834, compared with 4,663 tons, valued at \$1,240,221 for the corresponding period of 1890-91.

THE CORN CORNER.

Coster & Martin attempted to corner May corn on the Chicago Board of Trade, but the attempt ended disastrously on the last day. With no intention of running a corner the firm early in the month found it had a large amount of corn bought for May delivery, with June sold. To escape a heavy loss they determined to run the price up. Favored by bad weather they succeeded in raising the price from 49 cents on Tuesday, May 17, to \$1.00 on Tuesday, the 31st, and last day of the month. On that day they made a fatal error in bidding \$1.00 at the opening, an advance of 20 cents over the closing price of the day before, while had they put the price down to 60 the large quantity of cash corn would have been tendered on contracts made by the shorts early in the month at 45 to 50. As it was, the short interest, instead of delivering on the 40-cent contracts, sold at \$1, delivered the receipts and demanded the cash. This turn of affairs was unexpected by Coster & Martin, and ninety minutes after the opening their capital gave out and the price dropped to 48½ cents.

The greatest loser by the failure is the Bank of Montreal, which advanced the firm large sums on corn as collateral and certified its checks. The bank lost about \$40,000, but would have lost nothing by advancing the firm \$100,000 additional as it was the bank's refusal to certify to more checks that brought about the failure.

The strongest and most conservative commission firms were losers as well as the small operators. Charles Counselman, Baldwin-Farnum, F. G. Logan, Kennett-Hopkins, George Boyden, C. C. Congden, J. M. Wanzler and Schwartz-Dupree-McCormick are among the losers. Corn received on consignment the last day was sold at \$1 and the consignor notified. But when the buyer could not pay the grain was sold out for 50 cents and the commission man had to pay the country shipper \$1 and stand the loss of 50 cents a bushel. Some of the receivers who had a car or so of contract grade would get together, combine their holdings and, to fill

receivers of corn did not let the grass grow under their feet. Here is one instance of quick action: Several cars came in over the Illinois Central, from Burnside station, fourteen miles out; the cars were whisked into the city in exactly twenty minutes, switched and placed in elevators. The grain inspectors were out in force on Sunday and Monday, and the Appeals committee of the Board



ALEX. M'DOUGALL.

spent some time at the tracks to pass upon any lots if the grading was questioned.

A small outside trader was short 5,000 bushels corn and asked his broker to endeavor to settle with the corn clique on as reasonable a basis as possible. Upon making his errand known a representative of the "long" house

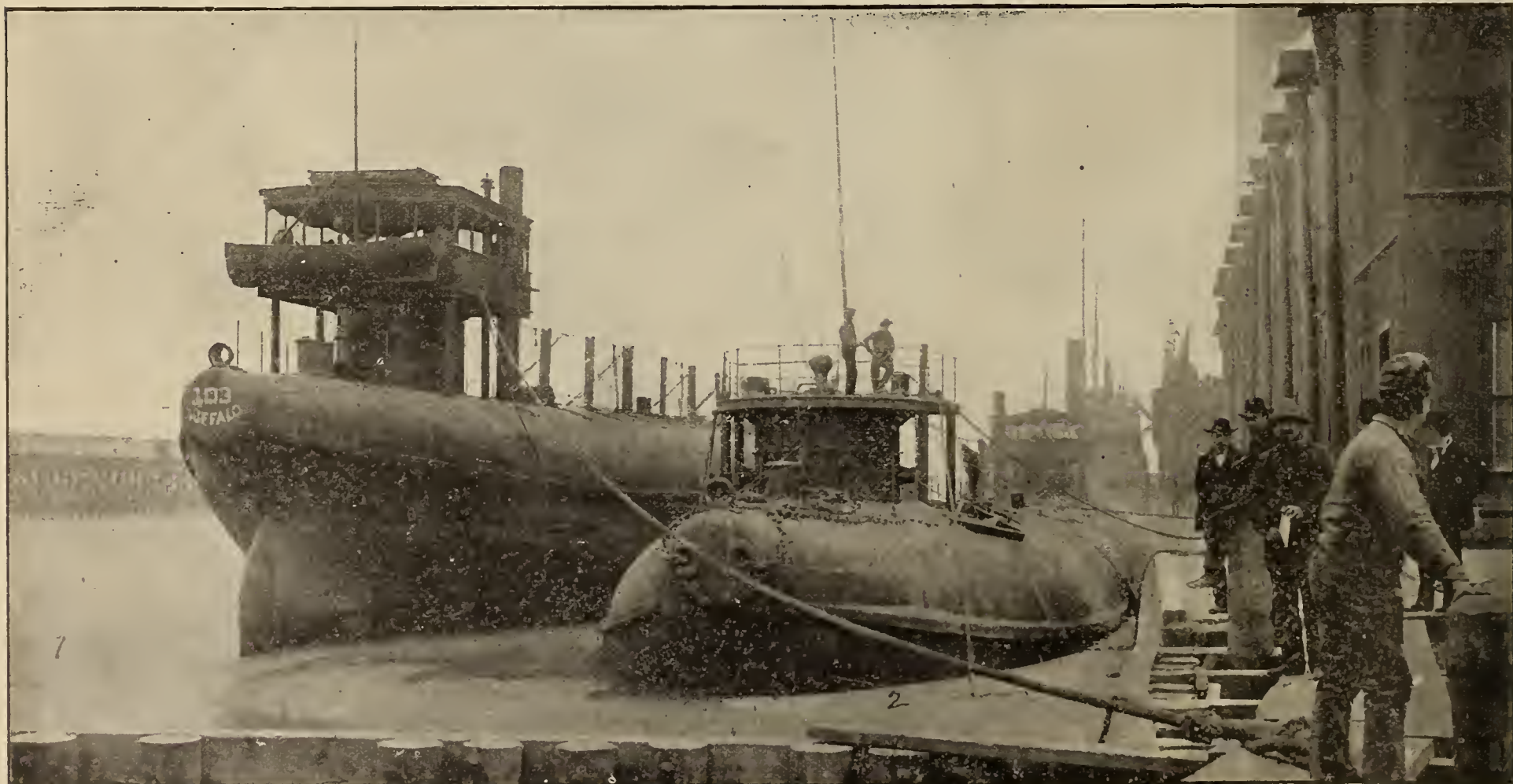
THE WHALEBACKS AND THEIR INVENTOR.

The most notable improvement made in recent years in the facilities for transporting grain from one point to another is the whaleback invented by Alex. McDougall. The large cars of 60,000 pounds' capacity are a great improvement over the old ones of smaller capacity, and the proposed 80,000-pound cars for through trains to the seaboard are also important improvements, but in the resulting benefits cannot yet be compared with those secured by the introduction of the whalebacks.

The first whaleback, a barge, was constructed at Superior, Wis., in 1888, and was called the "101." It has 437 tons registry and 1,400 tons' carrying capacity. Those built since are much larger. The vessel was ridiculed by vessel builders and nicknamed the "pig." It cost \$45,000, and the first two seasons netted its owners \$70,000. A number of other barges have since been constructed. The "102" and the "106" have a registry of 1,132 tons, and carrying capacity of 3,000 tons; the "104," "105," "107" and "109" are of 1,216 tons registry and 3,300 tons' carrying capacity.

From the illustrations given herewith the reader can obtain an excellent idea of the appearance of the steam whalebacks and their construction. The steamers differ from the barges in that they have a steam plant and an elevated cabin. The steamer Colgate Hoyt is of 1,008 tons registry and 3,000 tons capacity, and attains a speed of 15 knots per hour on 800-horse power.

In the beginning of the year 1890 the whaleback vessel patents went into the hands of the American Steel Barge Company, with \$500,000 capital. In that year they built one steamer and four barges, and in the latter end of the season decided to increase their investments in the vessels to \$2,000,000, and to establish a manufacturing plant at some available lake port. The site of the port was "put up to the highest bidder," so to speak, and in January, 1891, it was found that Superior had "won the toss," at a cost of the equivalent of a quar-



TWO WHALEBACK STEAMERS.

out a round lot, buy a thousand bushels or so at 98 cents, of which 48 was a total loss when the buyers failed to pay.

Coster & Martin had a branch office in New York, whence they went to Chicago in 1888. They were young men, Charles Coster, the senior member of the firm having celebrated his twenty-sixth birthday the Sunday before the failure. David I. Jackson was the New York partner.

In their efforts to get the property housed and inspected

said: "We do not see that we are called upon to be philanthropists."

On Tuesday Charles Coster, W. N. Martin and David I. Jackson, of Coster & Martin, made a voluntary assignment.

North Stairs & Co., Evansville, Ind.: "Keep your AMERICAN ELEVATOR AND GRAIN TRADE up to its present standard and you will always find us ready to renew our subscription."

ter of a million dollars, probably the largest bonus ever paid for the location of a similar plant.

The American Steel Barge Company broke ground for its present great shipyard in the early spring of 1890, and in that year, with such triumphant energy did it proceed, it built and launched four vessels, and built and prepared for launching three others, all of which, with nine built during 1891, were in commission on the Great Lakes or the Atlantic Ocean during the past year.

During 1891 the Barge Company increased its capital

to \$4,000,000, organized the Pacific Barge Company with \$500,000 for operations on Puget Sound, and startled the world by chartering the steamer Charles W. Wetmore with wheat from Superior to Liverpool. The vessel was lightered of its cargo at Kingston on Lake Ontario, ran the rapids of the St. Lawrence with a pilot, reloaded at Montreal, and with 226 tons of coal on its turtle-back made its way to Liverpool without having a pound of the coal disturbed or the footprints in the top of its cargo filled in. It left Liverpool in water-ballast for New York, where it arrived in eleven days. In thirty days more it had been reloaded with machinery and coal, and left Wilmington, Delaware, for a voyage of 15,000 miles to Puget Sound, where it arrived in seventy days, and where it is now in service in the San Francisco coal business. The accomplishment of these trips was not so much in the running the rapids of the St. Lawrence, but in the demonstration of the practical fact that here in the heart of North America could and would be built steel steamers that would materially lessen the carrying charges between the Great West and Europe.

For the actual cost of carrying the Wetmore's cargo of wheat from Superior to Liverpool, including all lighter-

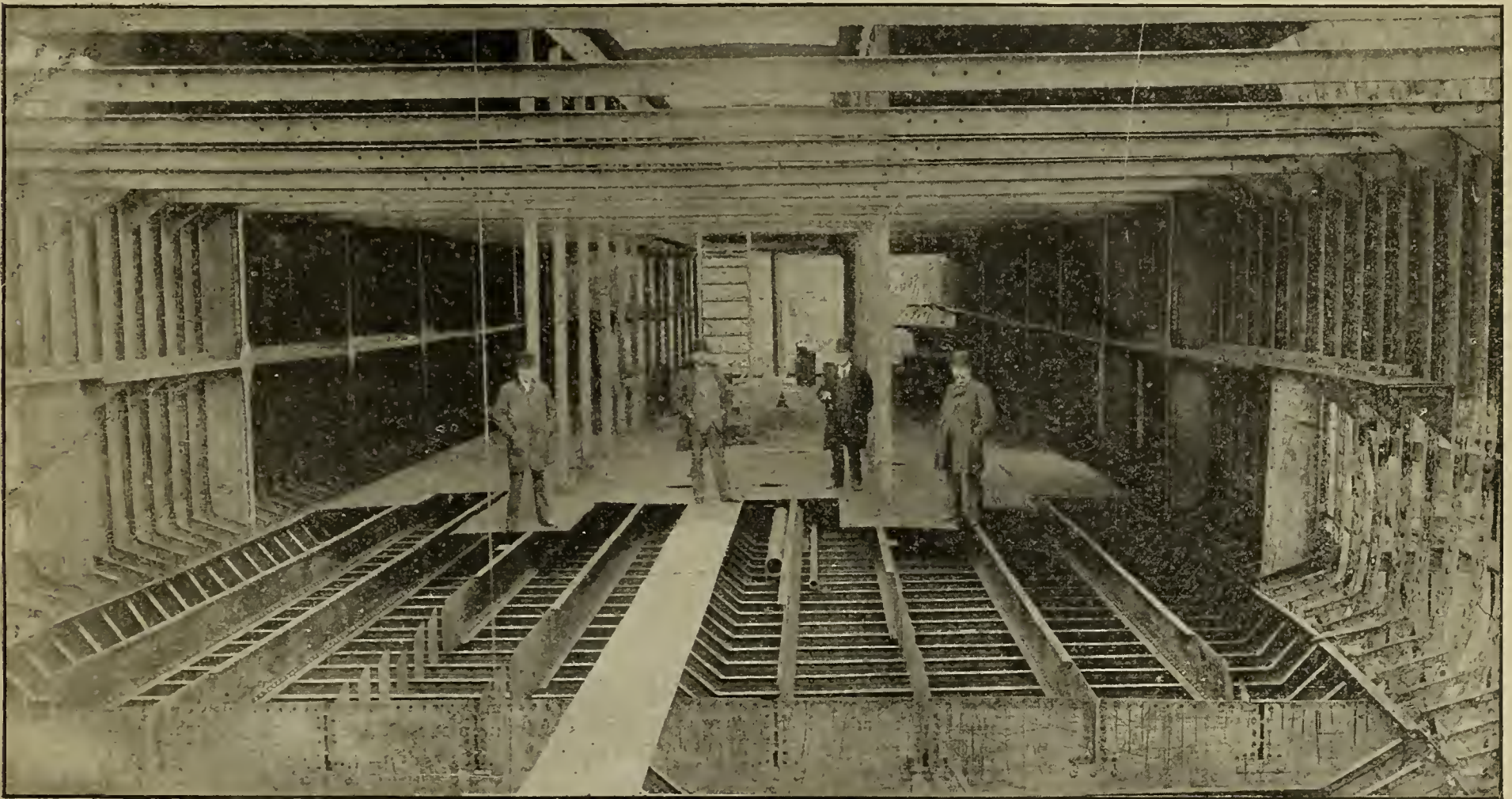
of vessel carriage, and with a keen sense of the necessary economies in vessel operation, stood between the shipper and the mariner, at the spouts of the elevators, and the invention sprang into existence. It has now become the parent of one of the great shipbuilding plants of the world, and gives employment at this time to 1,200 men. At this yard there are now under construction nine steel vessels. The twenty-seventh vessel of the whaleback type is on the stocks.

TO DESTROY CHINCH BUGS.

Enthusiastic entomologists believe that the devastation of the farmers' crops by the chinch bug will be stopped forever. The bug is to be exterminated by the spreading among the species of a deadly infectious disease. Prof. F. H. Snow, who has long been experimenting with this mode of exterminating chinch bugs, says: "As long ago as 1865 it was observed that chinch bugs occasionally disappeared from infected regions in a most mysterious manner. Careful search would reveal that on the ground myriads of bugs lay dead. An entomologist of excellent reputation, called attention in 1865 to such a disappearance

SHORTAGES AT NEW ORLEANS.

The recent prominence of New Orleans as a point of grain export has brought some troubles in its train, notably one of grain shortages in consignments thence from the West. So flagrant have "shortages" been of late, as announced by the trade there, that the New Orleans Board of Trade sent a special committee of three to Memphis and Kansas City to undertake, in conjunction with the grain interests of those cities, a thorough investigation. The Memphis Board of Trade has taken up the work of inquiry, as well as the Kansas City Commercial Exchange. The New Orleans representative at Kansas City said: "The purpose of this meeting is to consider and act upon the best plans of investigating the losses upon grain in transit between Kansas City and New Orleans. The grain men of both cities have suffered severely from this cause. At New Orleans we have had before the grain committee of the Board of Trade the president of the St. Louis & Mississippi Valley Transportation Company. He says that he has been handling grain by barges to New Orleans for thirteen years, and that their losses in weight will not exceed an average of one-third



INTERIOR OF WHALEBACK IN PROCESS OF CONSTRUCTION.

ing and elevator charges at Kingston and Montreal, was under 9 cents per bushel. The lake and canal rate to New York from Chicago averages 4.55 cents per bushel, and the rail and lake rate about 9.06 cents per bushel, while the all rail averages 14 cents. It is 467 miles from Superior to Chicago by the nearest rail route. A line of whaleback steamers from Superior to Liverpool would effect an annual saving of more than 10 cents per bushel over the Chicago route.

But the whaleback is an economizer over all other forms of vessels built. It "carries the flag" for the maximum cargo with the minimum of power and coal consumption and hands employed. This it has now amply proven, and the owners of the McDougall patents are besieged from all quarters of the world for vessels to put in commission. The cost of construction of the whaleback is materially less than that of other vessels, and they would upon that score alone get into the service of every navigation company in the world. The whaleback shipyard is not only an anomaly, therefore, in the world's great shipping and manufacturing industries and interests, it is a gigantic and permanent tribute to the invention of a Scotch-American citizen and to the vast and absorbing commercial necessities and energies of the American people. To reach the ocean-carrying trade, it was necessary that all previous tariffs of rates of transportation should be wiped out. Without some invention in marine architecture that was an impossibility. Alex. McDougall, an old vessel-master and shipping agent, full of the problems

as I have described. He declared it as his opinion that this disappearance was due to the existence of an epidemic disease among the bugs. Prof. S. A. Forbes, state entomologist of Illinois, in 1882 began his observations upon the bodies of chinch bugs taken from regions where one of these marked disappearances had occurred, and soon announced his discovery of a bacterial organism, undoubtedly the usual agency in the production of an epidemic among chinch bugs. Field experimenting in 1891 was conducted on a large scale. During the season infection was furnished to about 2,000 farmers, chiefly in Kansas. I received in all 1,400 reports from farmers stating the results of their experiments. Of these reports 1,072 indicated successful results from the use of the infection, 181 unsuccessful, and 147 may be classed as doubtful. Thus of all experiments over 76 per cent. were successful."

Philadelphia received in May 1,164,087 bushels of wheat, 1,919,399 of corn and 371,627 of oats, besides 300,000 barrels of flour; and exported in the same month 669,849 bushels of wheat, 2,326,045 of corn, 85,800 of oats and 179,056 barrels of flour.

Kansas City, Mo., has received during the crop year ending July 1, 1892 (the June receipts partly estimated) 19,320,000 bushels of wheat, 12,000,000 of corn, 5,500,000 of oats and 1,630,000 of rye; against 7,496,000 bushels of wheat, 7,862,000 of corn, 4,825,000 of oats and 109,000 bushels of rye, in the preceding crop year.

of 1 per cent. Now, gentlemen, we think it is as much to your interest as ours to take vigorous steps to ascertain wherein lies the fault, and with your assistance we propose to do it."

The statement was made that no charges were preferred against agents and employees of any transportation line, but there was a leak somewhere. The grain interests could not tell where it was, but they intended to find out, and desired the co-operation of the railroads. In the general discussion which ensued a good deal of heat was manifested. The representative of the Memphis route was reported indignant that there was such a suggestion that there could be any negligence or knavery on the part of the railway employees who might handle grain in transit. An agent of the Missouri Pacific did not believe the fault lay with the transportation lines. Some of the grain men were rather direct in suggesting that it could lie nowhere else, and pointed out that the cars which went through to destination under seal never exhibited these remarkable shortages so common in cases where grain was transferred on the way. It was stated by representatives of certain houses that they had been compelled to cease all shipments unless their cars were taken to go through without transfer. A committee of investigation was appointed.

The Pennsylvania and Reading railroads have made important reductions in rates on grain, flour and feed from Pennsylvania points to Philadelphia.

COMMUNICATED

[We invite correspondence from every one in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

ILLINOIS ITEMS.

Editor American Elevator and Grain Trade:—I became connected with the Mt. Pulaski Grain Company last October, and my business at New Holland, Ill., was conducted by G. M. Sloan, the firm being St. John & Sloan. I have just sold my New Holland elevator to D. H. Currey of Mason City, Ill., and we, St. John & Sloan, have bought of Wilson & Myrick their elevator at Kenney, Ill. The elevator is known as the "Kent Elevator," and Mr. G. M. Sloan will conduct the same under the firm name, St. John & Sloan. I have for several years taken your valuable AMERICAN ELEVATOR AND GRAIN TRADE, but at the expiration of my last subscription I thought I could get along without it, but after a few months I find I cannot. Therefore please inclosed find \$1 for which send the AMERICAN ELEVATOR AND GRAIN TRADE to the Mt. Pulaski Grain Company. This company has elevators at Mt. Pulaski, Chestnut, Cornland, Latham and St. John. Our paid up capital stock is \$30,000, and our officers are John W. Spellman, president; Van R. St. John, vice-president, and F. W. Obermiller, secretary and treasurer.

Yours,
VAN R. ST. JOHN.
Mt. Pulaski, Ill.

TWO MILES OF IDLE BOATS.

Editor American Elevator and Grain Trade:—The worst case of boldly evading a law is practiced by the railroad grain elevator combines of New York and Buffalo.

Notwithstanding that the law allows the elevators three eighths of one cent a bushel more for transferring grain than they used to charge under free competition they are exceeding the law at Buffalo nearly half a cent a bushel, viz., by making the grain pay seven-eighths of one cent a bushel; also by collecting \$2 per 1,000 bushels for the use of the steam shovel.

At New York they force grain to pay 1½ cents.

Now, it is not denied that these elevator combines are controlled by the railroad companies, and their sole object is to annihilate the Erie Canal.

During the winter months rail rates on wheat from Buffalo to New York were 74.5 cents per bushel, but now they will not permit the Erie boatmen to get a cargo at 2¼ cents. There are to-day, May 13, two miles of boats lying six and eight abreast at the Queen City waiting for grain cargoes. Will the merchants of New York and Buffalo permit such an outrage to be continued?

As a boat owner, and speaking for boat owners in general, all we want is an equal show with the railroads in transfer charges on grain.

Yours respectfully,
CAPT. M. DE PUY.

A CHECK ON YOUR WEIGHMAN.

Editor American Elevator and Grain Trade:—When a car of wheat is loaded out to be shipped, the figures representing the weight of the carload are made the basis on which pay is collected from the buyer, and on which freight is paid to the company. If the scale does not weigh correctly or the figures are changed subsequently then the succeeding transactions are certainly full of mistakes, no matter how careful the clerk may be, and even if finally corrected it will only be after much annoyance. The importance of exact weights is plain to every one.

It is, however, impossible to weigh grain exactly on track or wagon scales. Scales or other mechanical means for weighing are inexact and become more so with continued wear and tear. The wind blowing against a car or across the track scale may make a difference of several hundred pounds. Beyond question such scales seldom weigh correctly, and weighmen are careless.

While one scale may wrongly indicate the same false weight on twice weighing a draft, yet it is quite certain that another scale would not repeat the mistake. By weighing twice or three times the true weight can be approximated close enough for practical purposes. The

great expense of having extra scales and the extra labor involved make it impractical to reweigh in an elevator. But there is a way to do this at small cost; that is by putting in an automatic scale that requires no attention. Somewhere in the house between the hopper scale and the shipping spout such a scale could be placed, and after the required number of drafts had been made the figures could be verified by comparison with the record of the automatic scale. Any error could be corrected at once before the grain had been shipped.

Or as a general check on the scales through the whole house, the grain received and the grain shipped could be run through an automatic scale, and after a day's business the figures on the automatic scales could be compared with those from the hopper and track scales, and any considerable discrepancy would show that something was wrong with the scales.

Yours exactly,

A. M. P.

RIGID INSPECTION FOR SPECULATIVE MARKETS.

Editor American Elevator and Grain Trade:—The report that a quantity of grain stored at an eastern market has been posted as being out of condition reminds me of the fact that western shippers dissatisfied with the stringent inspection at Chicago have often pointed with much satisfaction to the inspection in this very same eastern market.

It is not my intention nor desire to say anything against the eastern market or its inspection; it is regarding the Chicago inspection that I wish to write. Chicago is the greatest speculative grain market on this continent and frequently a large quantity of grain is carried in store during the summer months. For this reason the contract grain must be inspected very carefully and the inspection rules rigidly enforced or grain will frequently get out of condition. If those who are eternally kicking against Chicago inspection would stop to consider what would be the effect of the posting on 'Change of grain, as being out of condition, they might succeed in convincing themselves that the stringent enforcement of the inspection rules serves to advance the interests of all concerned.

If several, if four, three, two, nay, if one large lot of grain was posted as being out of condition and no one stood ready to make good the loss, the consternation that would follow would surpass all the broad claims of the friends of stringent inspection. A panic, failures and loss of confidence in Chicago inspection would follow. Thereafter Chicago inspection would be useless, yes worse than worthless, and it would take years for the department to regain any part of the lost confidence of the dealers.

Grain is seldom held long in store at Atlantic seaboard points; it is generally shipped out soon after it is received, so the grain received is not inspected with the expectation that the contract grades will be held for months. Loose inspection may be all that is necessary at those cities, but at Chicago and other speculative markets we must have stringent rules rigidly enforced.

I. B. RIGID.

Queries and Replies.

Questions and answers are inserted under this head free of charge and all are invited to avail themselves of this column.

No. 31. A Query from South America.—The following query was sent to us by Leonard D. Harrison of New Haven, Conn., for insertion in the columns of the AMERICAN ELEVATOR AND GRAIN TRADE: We desire to know where we can obtain the best wheat; the price of every 100 pounds; how it is packed for export; the cost of freight from shipping port, and also the name of the port; how much flour 100 pounds of wheat will produce, and what other product is obtained from the residues, and what space is necessary for a full mill plant without motor.—LOPEZ OLIVER & Co., Barranquilla, Colombia, South America.

Flax fiber manufacturers are moving from Ireland and England to the United States.

It is claimed that the Southern states will raise larger quantities of all kinds of grain this year, owing to the decreased area of cotton.

Trade Notes.

"Little bits of stinginess
Regarding printer's ink
Busts the man of business
And makes his credit sink."

—Snow Hill Press.

The Weber Gas Engine Works at Kansas City, Mo., report trade very good.

Frederick F. Meyer, Jr., of Newark, N. J., has incorporated a company to manufacture scales.

Next to godliness, there is nothing that a merchant should so ardently pray for as courage to advertise.

Advertising does pay when judiciously placed. Only the very best mediums will bring to the advertiser satisfactory results.

The Dustless Fanning Mill Manufacturing Company of Flushing, Mich., has been incorporated with \$5,000 authorized capital.

The Anti-Choke and Elevator Alarm Manufacturing Company has been incorporated at Duluth, Minn., with \$125,000 capital stock.

Cooper, Roberts & Co., builders of automatic engines at Mt. Vernon, O., report that business is good. They are melting every week more than 100,000 pounds of pig iron.

"We haven't goods enough on hand to justify us in advertising." Then advertise and manufacture more. The demand regulates the supply. The supply does not regulate the demand.

Finding "The Leffel Water Wheel & Engine Company" of Springfield, too long a name for convenient business use, the company has adopted the name of its president, and will be hereafter known as The W. C. Leffel Company of Springfield, O.

The Kenneberg Roofing Company of Canton, O., manufacturing superior steel roofing, corrugated iron roofing, siding and ceiling, has issued a new catalogue of its products, copies of which it will be pleased to send to any one wanting anything in that line.

Articles of incorporation have been filed by the J. S. Wolfe Manufacturing Company of Audubon, Ia. The purpose is to manufacture an automatic grain meter, register and swinging elevator. The authorized capital is \$50,000 and there are five incorporators.

Thornburgh & Glessner, manufacturers of mill and elevator supplies at 110 South Jefferson street, Chicago, have changed their firm name to The Thornburgh Manufacturing Company. No change, however, has been made in the business management, which remains as in the past, with Mr. H. L. Thornburgh.

Many advertisers have a theory that a notice all in capitals is better than one in lower case. They are mistaken. The eye seeks for variety. All capital letters reach the same height, and all come down as low as the others, but in small letters some rise above the crowd and some fall below, thus giving the proper relief to the vision.

To build up a new business, to increase or hold on to an old business, judicious advertising is an absolute necessity. It is fully as much of a necessity in making a success as the engaging of proper help or the selection of just the right location for the office and salesroom. Advertising becomes a luxury only when injudiciously done.

The Nordyke & Marmon Company of Indianapolis, Ind., has just issued a large illustrated catalogue of 326 pages, containing a complete description and price list of its machinery. In addition to elevator supplies this enterprising company carries a complete line of flour and cornmeal machinery and pulleys and shafting. The catalogue is one that will prove of great value to elevator men about to purchase anything handled by the Nordyke & Marmon Company. Copies can be obtained by addressing the company.

The Berger Manufacturing Company of Canton, O., has issued an elaborate catalogue of 125 pages given up to the roofing specialties for which this company has so long been in repute in the trade world. Particular space, in illustration and descriptive matter, is given to Berger's patent steel roofing, corrugated iron siding, ceiling, fire-proof shutters and metallic paint. Illustrations are given of a number of large establishments, in the construction of which the Berger roofing and corrugated siding were used. In a neatly ribboned souvenir, accompanying the catalogue, are some salient facts about the Berger patent

steel roofing, in testimonials received from the company's customers.

As will be observed from their advertisement Messrs. Huntley, Cranson & Hammond, builders of the well-known Cranson Scourers and Monitor Separators, have removed their Western branch and office from 63-65 South Canal street, Chicago, to the Corn Exchange, Minneapolis, Minn., where Mr. A. F. Shuler will have charge. The rapid growth and increase in the demand for these machines in the West and Northwest, in the past two years, has been remarkable, and it is expected this move will prove of advantage and benefit to the milling community as well as to the builders of these machines. A very gratifying condition of business is reported from their home office and works at Silver Creek, N. Y.

The James Leffel & Company of Springfield, O., has celebrated its thirtieth year of continuous business in water wheels. It has added many improvements to its James Leffel Wheel in the past two years, and has designed a large number of new styles, incorporating in them the best ideas of a large experience. The manufacturing plant of this company has also been recently greatly extended, and various pieces of new, improved and heavy machinery added, all adapted to the heavy water wheels it is now manufacturing. The company shipped some time ago one James Leffel Wheel and casing weighing forty-five tons; also filled one order for nineteen large wheels for one pulp and paper company.

AN IMPROVED IMPROVEMENT.

A revolution has occurred. The price of an important improvement for elevator men and grain shippers has been cut in two—almost in three—not its intrinsic value, that will be trebled, but its cost to scale owners and buyers. The chief difficulty heretofore in supplying owners of scales with the Demuth Double Entry System "Check Scale Beam" has been that it must be a part of the scale, made and furnished with the scale. The expense and inconvenience of tearing scales to pieces and sending them almost to the Atlantic Ocean to have them fitted with this improvement was, with most of our elevator companies, too great to be seriously considered. However a great many have done this very thing, realizing, as they did, the value and the absolute need of this system of recording weights. But this difficulty has been overcome. Mr. Demuth's new cipher beams will fit any scale, large or small, and the system is exactly as certain in its work as when it is supplied as a part of the scale beam proper.

The accompanying cut hardly needs an explanation to those who are familiar with this system of recording scale weights. The cipher beams are made fast to the scale frame, or box, by means of iron rods or braces and do not come in contact with any part of the scale proper. The indexing slide on the cipher beam has two small rods projecting forward so as to fit closely without coming in contact with the sliding poise on the scale beam. The slide on the cipher beam will, therefore, be moved with the poise on the scale beam to within about the balancing point; the play of the poise between the rods of the indexing slide being sufficient to allow the poise to be adjusted to the balancing point without touching the rods. When the scale is balanced the slide is set against the poise and the combinations of letters indicated by its points transferred to the scale book. Just as simple as can be. Any one can put them into place in a few minutes after suitable braces or supports have been made. The braces must, of course, be furnished by the owner of the scale, there being such a variety of scales in use as to make a uniform brace or support impracticable.

Mr. Demuth's Double Entry System is now in use in prominent elevators all over the country, and is recognized by practical accountants as a necessity, an absolute necessity, as no other method embodies the principle of double entry. There are mechanical devices which are thought to be a perfect solution of the problem of "how to get a correct record"; but with such a system a correct record depends on a correct mechanical device. Here's the rub. There is no mechanism about the double entry system. It only requires the weighman to do what a bookkeeper does, to wit: To make several entries of the same thing in different ways and in different places. That is all there is to it. Interested parties are referred to Mr. Demuth's advertisement in this number of the AMERICAN ELEVATOR AND GRAIN TRADE.

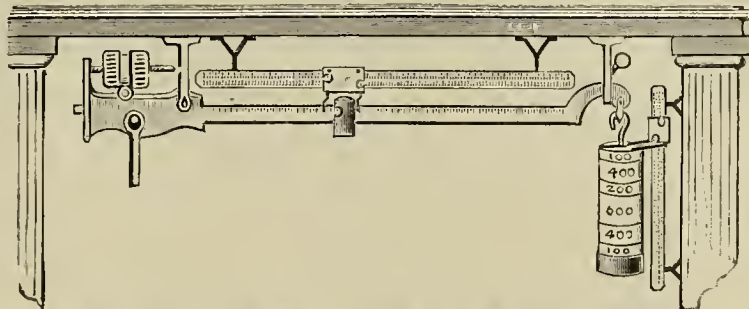
FLAX PRODUCTION.

BY JOHN HYDE OF THE CENSUS BUREAU.

The total area of land devoted to the cultivation of flax in the United States in 1889 was 1,318,698 acres or 2,060.47 square miles, the production of flaxseed 10,250,410 bushels, the production of fiber 241,389 pounds, the amount of flax straw sold or so utilized as to have a determinable value 207,757 tons, and the total value of all flax products \$10,436,228.

Although there has been no period when the value of the flax products of the United States has amounted to one-half of one per cent. of the total value of the agricultural products of the country, there has never been wanting a small cluster of states in which flax culture was for the time being a matter of considerable importance, while general interest in such culture has always been kept alive by the vagaries of its geographical distribution. Flax production is, in fact, one of the curiosities of American agriculture, just as for 3,400 years of authentic history it has been one of the most interesting features of the agriculture of the old world.

From early colonial days there has come down but little information of a statistical character concerning either flax or hemp. The cultivation of one or the other of these products was, however, made compulsory in Massachusetts in 1639, in Connecticut in 1640, and in Virginia, where the domestic manufacture of linen thread was likewise compulsory, in 1662, Pennsylvania, Maryland and other colonies making similar enactments. In 1729 1,813 bushels of flaxseed, valued at the equivalent of \$1.14 per bushel, were exported from Pennsylvania to Ireland and Scotland, and within the next 25 years the flaxseed exports of Connecticut alone attained an annual value of \$80,000, representing in all probability not far from 400,000 bushels of seed.



DEMUTH DOUBLE ENTRY SYSTEM "CHECK SCALE BEAM."

Not until 1849 are there found available any general statistics of flax production in the United States, but at the Seventh Census either flax seed or fiber was reported from every state and territory except Louisiana and Minnesota, though in all but a few states the production was insignificant. Ohio, Kentucky and New York produced 57.38 per cent. of the entire seed production, and Kentucky, Virginia and New York 52.42 per cent. of the entire fiber production of the country, Ohio producing two and one-half times as much seed and Kentucky more than twice as much fiber as any other state. Thus, at the very outset of any statistical review of flax production in the United States, the investigator is confronted by that remarkable tendency to geographical concentration which is an almost invariable characteristic of flax notwithstanding its cosmopolitan character as a plant.

The census of 1860 dealt with a flaxseed production slightly in excess of that reported at the preceding census, but the production of fiber showed a falling off of 38.78 per cent. Three of the greatest flax-growing states of to-day, Minnesota, Kansas and Nebraska, appear in the list for the first time, with a total of 131 bushels of flaxseed and 3,118 pounds of fiber. Of the total fiber production of the country 50.86 per cent. was credited to New York and Ohio, while Ohio and Indiana produced 63.83 per cent. of the total amount of seed. Kentucky had fallen to the third place in the production of fiber, but the amount produced in that state was more than three times the present production of the entire country, although it formed but one-seventh of that of the period under consideration.

The close of the next decade witnessed the high-water mark of fiber production in the United States, the production of 1869 being to that of 1889 as 112 to 1. While this country has never yet been able to compete with foreign nations in the production on a commercial scale of the finer grades of flax, such as the Courtrai and best Dutch, and no less an authority than Mr. Charles Richards Dodge seems to doubt whether it ever will, at least

so long as the preparation of the fiber requires such an expenditure of labor, care and patience as the peasantry of Europe now bestow upon it, it enjoyed for some considerable time a fiber industry of no small importance. The manufacture of flax bagging, suddenly put an end to by the abolition of the import duty on jute butts, had doubled the acreage in flax within three years. During that period, 1866 to 1869, the proportion of the cotton crop baled with flax bagging increased from three-sixteenths to three-fourths, and the baling of the crop of 1870-1871, consisting of 4,317,006 bales, taxed to its utmost the capacity of every bagging mill in the country. Of the 27,133,034 pounds of fiber reported at the census of 1870 as the production of the previous year no less than 17,880,624 pounds, or 65.90 per cent., was produced in Ohio. New York and Illinois ranked second and third respectively, with a combined fiber production of not quite 6,000,000 pounds. In seed production Indiana again held the second place, Ohio leading, and Illinois standing third, the aggregate production of the three states being 75.93 per cent. of the entire crop, contributed to by 33 states and territories. At this census California is found in the list of flax growing states for the first time.

The Tenth Census found the relative production of flaxseed and fiber practically reversed, the latter having shrunk to less than one-seventeenth of its then recent proportions, while the former was beginning to assume something of the importance it was destined so soon to attain. While New York was once more the center of the fiber industry, producing considerably over one-half of the total, the center of flaxseed production had moved westward to the Mississippi River, Illinois being well in the lead, with Iowa second and Indiana third, the production of these three states constituting 66.14 per cent. of the total production of the country. At this time Ohio stood fourth, closely followed by Wisconsin and Kansas, and at a greater distance by Missouri, this second group of states producing 28.36 per cent. of the entire crop. That portion of Dakota territory which has since been made the state of South Dakota, and which now leads the entire country in acreage devoted to flax, had little more than 2,000 acres thus cultivated, while the remainder of the territory, now the state of North Dakota, had only a little patch of five acres, yielding a crop of 50 bushels.

Although the change in flax production between 1869 and 1879 was one of great economic importance, involving as it did the almost total extinction of a most promising industry, it was not nearly so remarkable as that well-nigh complete transfer of the flax-producing area which has taken place during the last decade. Unfortunately the report of the Tenth Census on agriculture, like its predecessors, contained only, so far as flax culture was concerned, the statistics of production, and gave no information whatever concerning acreage. It therefore becomes necessary to make production the sole basis of comparison, a proceeding that is far from satisfactory, as will readily be perceived when reference is made to the wide variation in the yield per acre, as shown by the census of 1890.

Proceeding, however, on this the only available basis of comparison, it is found that between 1879 and 1889 there was a decrease in the fiber production of Illinois, Indiana and Ohio of 65.57, 82.73 and 85.10 per cent. respectively, and in the flaxseed production of the same states one of 98.07, 98.76 and 75.46 per cent. respectively, Wisconsin also showing a decrease of 87.53 per cent. in its flaxseed production, although its insignificant production of fiber showed a slight increase. On the other hand, the flaxseed production of Nebraska is found to have increased eighteenfold within the decade, and that of Minnesota twenty-seven fold, while South Dakota produced 67 bushels of flaxseed in 1889 for every bushel raised in the corresponding portion of Dakota territory in 1879. These states, with Iowa, the only state in the Union that ranked as a leading flax producing state both in 1879 and 1889, contained at the latter date 79.82 per cent. of the total flax acreage of the country, and produced 80.06 per cent., or slightly over four-fifths of the total amount of flaxseed. The production of this group of states, moreover, exceeded by 1,035,613 bushels, or 14.44 per cent., the entire flaxseed production of the United States at the census of 1880. While flaxseed is reported from 31 states, flax straw (so far only as it had any value) from 28 states, and fiber from 21; nine of these states had less than 100 acres each in flax, and the

17 having the smallest acreage in this product had a total flax area of only 2,784 acres and an aggregate production of only 21,205 bushels of seed. In the last mentioned group appear the once important flax-producing states of Virginia and Kentucky, the one with 131 acres in flax and the other with 186, and also Pennsylvania, North Carolina and Tennessee. In a general comparison of acreage devoted to flax New York stands thirteenth and Ohio, which has produced more flax during the last 50 years than any other state in the Union, occupies the eighth place, following close behind the states of the far West, as if reluctant to be regarded as out of the race. The six New England states had a total of 26 acres in flax, the entire production of which, consisting of 70 bushels of seed, 1,611 pounds of fiber and a few tons of straw, was valued at \$151. With the exception of a few hundred bushels of flaxseed raised in Northern Texas, there is no flax production reported from any state bordering on the Gulf of Mexico, and of the 5,082 acres in flax reported from the Pacific slope 4,252 acres are in Whitman county, Washington, east of the Cascade Mountains.

While the work of the census enumerators has been carefully verified in all cases of doubt, it has not been found practicable so far to extend the investigation as to elicit any expression of opinion from Western flax growers in general as to the causes that have operated to change so completely the location of the principal flax-producing region. There is, however, no lack of testimony that, notwithstanding the results of chemical tests and the experience of European flax growers, the farmers of Illinois and Indiana still cling to the idea that flax is necessarily an exhaustive crop, and the past decade having brought under cultivation what little raw land remained to be subdued in those states, flax culture has accordingly given way to other crops.

Concurrently with a greatly reduced acreage in these and other of the older states there has come an increased demand for flaxseed, which has commanded a price that has rendered it not unfrequently a more profitable crop than either corn or wheat, especially when raised upon strong soils of the newer states west of the Mississippi River. Although flax is undoubtedly a favorite sod crop with the farmers of the Northwest, that its cultivation has been resorted to to any great extent merely for the purpose of taming the soil is exceedingly unlikely, not only because soils similar to those on which flax is now raised produced magnificent crops of wheat and other cereals long before the cultivation of flax in those regions was ever thought of, but for the still more important reason that it is in the older counties, both of Minnesota and South Dakota, that the most remarkable development of flax culture has been witnessed.

It is worthy of note in this connection that just as the cultivation of flax is centralized in a group of four states, while actually extending into 31, so is a similar concentration of production to be found within the limits of each individual state. Thus, South Dakota derived 49.33 per cent. of its crop from seven out of its 47 flax-producing counties, Iowa 50 per cent. from eight out of 86, Nebraska 50.85 per cent. from five out of 79, Minnesota 51.05 per cent. from eight out of 63, and Kansas 53.61 per cent. from seven out of 76. In some of these counties the density of flax production is indeed remarkable, regard being had to the character of the crop. Minnesota, Iowa and Nebraska all contain counties that, with a yield of only about ten bushels to the acre, are annually producing several hundred bushels of flaxseed for every section of land within their borders.

The state that had the largest acreage devoted to flax in 1889 was South Dakota, but that state, having a very low average yield per acre, was outranked in the production of flaxseed, and likewise in the total value of all flax products, both by Minnesota and Iowa. Of the states containing 1,000 acres or upward in flax, Wisconsin had the highest average yield of flaxseed per acre, 11.42 bushels, Idaho and Iowa following next in rank. It also had the highest average value per acre of all flax products, \$13.39, New York and Idaho ranking second and third. North Dakota had the lowest average yield of flaxseed per acre, 3.76 bushels, and the lowest average value per acre of all flax products, \$3.63. Of the 756 flax-producing counties in the United States, Mower county, Minnesota, produced the largest amount of flaxseed, 312,103 bushels, and Lenawee county, Michigan, had the highest average yield per acre, 26.6 bushels. The average yield for the entire country was 7.77 bushels per acre, an average that

was exceeded by every leading flax-producing state except South Dakota, the combined large acreage and low yield of which had an appreciable effect upon the average of the country at large.

Although the agricultural investigations of the Eleventh Census have been, as a whole, nearly two and one-half times as comprehensive statistically as those of any preceding census, such are the magnitude and diversity of the agricultural interests of the country that not a few branches of investigation have still had to be confined within comparatively narrow limits. Accordingly no attempt has been made to ascertain the separate values of flaxseed, straw and fiber, and the collective values will be found to vary not only with the variation in the prices of the individual products, but also according to the proportion borne by each of the three to the entire amount sold. In states where but little is realized from the sale of straw or fiber there is a close correspondence between the production of flaxseed in bushels and the amount received by the producer in dollars, the average value of the seed being evidently a trifle under \$1 per bushel. It must not, however, be supposed that there was any decided approach toward uniformity in the price received for flaxseed. On the contrary, there appears to have been considerable variation, although there would scarcely be warrant for inferring its precise limits so long as it is impossible to determine the exact value of the straw which is included with the flaxseed in the report. Throughout the greater portion of the principal flax-producing region, however, flax straw is practically of no value, not being utilized even for tow or for paper making. Much of it is got rid of by burning, the small percentage that is turned to good account being used either for thatching purposes or as bedding for stock, although in some instances it is used for feed, a practice greatly to be deprecated.

In the 14 states having 1,000 acres or upward in flax the average value of all flax products per acre ranges from \$3.63 in North Dakota to \$12.62 in New York and \$13.39 in Wisconsin. Michigan and Virginia, each with a smaller area in flax, average \$13.30 and \$14.25 per acre respectively. All the states having a high average value of flax products per acre are comparatively large producers of fiber with the exception of Vermont, whose 20 bushels of flaxseed were the product of a single acre of land, and California, which had an average of 16.59 bushels per acre, raised mainly on the highly productive lands of the county of San Luis Obispo. The best of the great flaxseed producing counties of Minnesota, Iowa or Nebraska shows an average value of flax products per acre of only \$12.70 as compared with \$15.38 per acre in Saint Clair county, Michigan, the county containing the Yale Flax Mills, with \$23.82 per acre in Washington county, New York, much of the product of which is used in the manufacture of twine, and \$31.58 per acre in Lee county, Virginia, a county in which there still lingers that domestic manufacture of linen which was formerly so important an industry not only in Virginia but in other of the older states. Lee county has, until within the last two or three years, been entirely destitute of railroads, and almost every family in the county has continued to make its own bed and table linen, towelings and other linen fabrics of fine quality.

In any comparison, however, either of the fiber productions of different states or of that of the entire country at different periods, it is important to remember that but little of the so called "fiber" produced in the United States within recent years has been fit for spinning, or has really been entitled to the designation that for convenience has been given to it in census and other statistical reports. While flaxseed is a well-defined product, subject only to the same quantitative and qualitative variations as agricultural products in general, flax fiber as known to the American farmer and manufacturer has not always had a like uniformity of meaning. Indeed, the utilization of the fibrous portion of the flax plant has varied so widely at different periods that any comparison of "fiber" production based solely upon statistical reports is liable to be misleading. The "fiber" reported at the various censuses up to and including that of 1860 was an excellent grade of scutched flax, fit for spinning, and able to hold its own against all but the finest imported varieties. The "fiber" reported at the census of 1870, which was raised to meet the enormous demand for bagging, was, on the other hand, only a very common quality of "tow," abounding in woody refuse and so carelessly prepared as doubtless in some measure to have led the way for that adverse legislation which

practically put an end to its production. The "fiber" of the present day is likewise, with few exceptions, only a coarse by-product, used mainly as upholstery tow. As a result, however, of the well-directed efforts of the Department of Agriculture there are indications of the revival in the United States of a genuine flax industry that should ultimately render the American people, the largest consumers of linen in the world, entirely independent of the foreign manufacturer.

In 1849 there was produced in the United States 562,312 bushels of flaxseed and 7,709,676 pounds of fiber, in 1859 566,867 bushels of seed and 4,720,145 pounds of fiber, in 1869 1,730,440 bushels of seed and 27,133,034 pounds of fiber, and in 1879 1,565,546 pounds of fiber were produced. The production of each for 1889 and of seed for 1879 by states was as follows:

States and Territories	1889.				1879.
	Area	Seed.	Fiber.	Total value of products.	Seed.
	Acres.	Bushels.	Pounds.	Dollars.	Bushels.
United States	1,318,698	10,250,410	241,389	10,436,228	7,170,951
Alabama.....	.....	.....	.....	.....	52
Arkansas.....	2	12	26	14	160
California.....	249	4,138	.....	4,910	45,770
Colorado.....	422	1,994	.....	1,960	.....
Connecticut.....	.....	.....	.....	.....	.....
Delaware.....	.....	.....	.....	.....	4
Florida.....	.....	.....	.....	.....	.....
Georgia.....	.....	.....	.....	.....	69
Idaho.....	8,002	83,409	.....	81,521	14,901
Illinois.....	4,672	35,013	57,776	40,766	1,812,438
Indiana.....	2,737	17,566	4,350	19,120	1,419,172
Iowa.....	230, 85	2,282,359	6,281	2,323,974	1,511,131
Kansas.....	114,069	994,127	36,093	1,008,242	513,616
Kentucky.....	186	1,321	12,295	1,928	2,192
Maine.....	24	46	1,611	127	88
Maryland.....	1	2	.....	3	34
Massachusetts.....	1	4	.....	.....	.....
Michigan.....	417	3,719	31,610	5,544	2,764
Minnesota.....	303,635	2,721,987	8,609	2,811,384	98,689
Mississippi.....	.....	.....	.....	.....	.....
Missouri.....	56,421	450,831	1,458	461,767	379,535
Nebraska.....	163,900	1,401,104	1,025	1,392,689	77,805
New Hampshire.....	.....	.....	.....	.....	.....
New Jersey.....	2	8	.....	14	5,283
New Mexico.....	.....	.....	.....	.....	834
New York.....	2,922	21,307	15,826	36,880	72,372
North Carolina.....	143	397	3,637	787	503
North Dakota.....	43,724	164,319	568	158,609	50
Ohio.....	20,553	145,557	18,377	179,288	593,217
Oregon.....	563	3,871	.....	5,270	21,742
Pennsylvania.....	517	4,183	173	5,772	5,352
Rhode Island.....	.....	.....	.....	.....	.....
South Carolina.....	.....	.....	.....	.....	.....
South Dakota.....	354,951	1,831,114	3,278	1,770,322	26,707
Tennessee.....	17	51	2,664	200	787
Texas.....	72	794	.....	835	73
Utah.....	.....	.....	.....	.....	.....
Vermont.....	1	20	.....	20	362
Virginia.....	131	538	27,133	1,867	4,526
Washington.....	4,270	42,285	.....	42,131	12,202
West Virginia.....	36	115	4,008	322	1,417
Wisconsin.....	5,973	68,227	4,591	79,958	547,104

The imports of hay in April were 4,162 tons, against 2,389 tons in the month of April preceding; and for the ten months ending with April 64,417 tons, valued at \$552,717; compared with 47,035 tons, valued at \$370,878 in the corresponding months of 1890-91. The exports of imported hay in April were 49 tons, against none in April, 1891, and 151 tons, valued at \$1,387 in the ten months ending with April; compared with 9 tons, valued at \$73 in the corresponding period of 1890-91.

Our imports of breadstuffs in April were, in bushels: Barley 186,455, corn 37, oats 2,163, rye 2, wheat 62,148, and wheat flour 36 barrels, against, for April, 1891, barley 352,163, corn 113, oats 923, rye 45,829, wheat 245, and wheat flour 2,832 barrels. In the ten months ending with April we imported 3,031,746 bushels barley, 15,214 of corn, 14,946 of oats, 83,529 of rye, 1,962,491 of wheat, and 460 barrels of wheat flour, valued at \$4,129,189; compared with 4,937,447 bushels barley, 1,771 of corn, 7,286 of oats, 125,379 of rye, 395,434 of wheat, and 7,237 barrels of wheat flour, valued at \$4,130,466, imported in the ten months ending with April, 1891. Of imported breadstuffs we exported in April 47,603 bushels barley, 941 bushels oats, and 139,098 bushels wheat, against 56,046 bushels barley, no oats, and 3,593 bushels wheat exported in April, 1891; and for the ten months ending with April 504,301 bushels barley, 9,731 of corn, 6,966 of oats, 16,172 of rye, 1,603,509 of wheat, and 102 barrels of wheat flour, total value \$1,541,667; compared with 73,269 bushels barley, no corn, no oats, 106,111 of rye, 453,553 of wheat, and 6,408 barrels of wheat flour, total value \$531,273 in the corresponding months of 1890-91.

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector P. Bird Price the grain received at Chicago during the month of May was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No Grade.
	2	3	4	2	3	4	2	3	4	
C. B. & Q.	2	2			3		25	16	13	1
C. R. I. & P.				1	28		1	10	14	1
C. & A.	1				14		1	17	13	8
Illinois Central.							5	6	1	
Galena Div. N. W.								5	6	
Wis. Div. N. W.	1						17	7	1	
W. St. L. & P.							4	3	4	
C. & E. I.								4		1
C. M. & St. P.	1				3		39	14	2	
Wisconsin Central.							1			
C. St. P. & K. C.					49			2	15	
A. T. & S. Fe.	8	5			50		5	83	91	1
Through & Special.	8				115		9	91	8	1
Total each grade.	2	21	5	1	712		111	254	169	13
Total W. wheat.										1,288

SPRING WHEAT.

Railroad.	2			3	4	No Grade.	White.			Mixed Wheat.
	2	3	4				2	3	4	
C. B. & Q.	6		59	43				48		3
C. R. I. & P.	6		3	6				18		
C. & A.			50	16				1		
Illinois Central.	2									
Galena Div. N. W.			30	16				3		
Wis. Div. N. W.	11		8	4						1
W. St. L. & P.										
C. & E. I.										
C. M. & St. P.	13		18	6				3		
Wisconsin Central.										
C. St. P. & K. C.	1		18	3		1				
A. T. & S. Fe.			5	1						
Through & Special.	674		244	36		17		43		
Total each grade.	713		435	131		18		116		4
Total Spg. wheat.										1,418

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C. B. & Q.	100	384	21	29	264	1,183	531	26
C. R. I. & P.	50	100	7	5	331	273	145	11
C. & A.	175	73	40	22	88	93	43	2
Illinois Cent.	403	199	130	26	182	145	161	14
Gal. Div. N. W.	42	98		10	27	133	234	11
Wis. Div. N. W.	1	2				2		2
W. St. L. & P.	169	26	32	9	55	29	27	1
C. & E. I.	57	17	25	1	54	32	8	1
C. M. & St. P.	14	35		6	24	168	113	40
Wis. Central.								
C. St. P. & K. C.	54	56	1	13	144	316	104	4
A. T. & S. Fe.	48	168	14	26	97	415	58	5
Thrh'g & Spl	38	14	6	1	245	70	20	
Total each grd	1,151	1,172	276	148	1,511	2,859	1,453	117
Total corn.								8,687

OATS.

Railroad.	White.			2	3	White Clipped.	No Grade.
	2	3	4			1	
C. B. & Q.	242	331	145		88		2
C. R. I. & P.	31	453	22		142		1
C. & A.	101	77	69		35		
Illinois Central.	320	145	292		32		
Galena Div. N. W.	115	314	69		210		6
Wis. Div. N. W.	76	150	20		9		2
W. St. L. & P.	82	80	66		15		11
C. & E. I.	17	12	22		2		
C. M. & St. P.	243	463	57		140		3
Wisconsin Central.	8				1		
C. St. P. & K. C.	57	90	23		26		
A. T. & S. Fe.	40	78	147		13		
Through & Special.	179	183	22		39		1
Total each grade.	1,511	2,376	955		751		13
Total oats.							5,653

RYE.

Railroad.	1			2	3	No Grade.
	1	2	3			
C. B. & Q.				25	6	
C. R. I. & P.				10	10	
C. & A.				4		
Illinois Central.				5		
Galena Div. N. W.				10	1	
Wisconsin Div. N. W.				1	2	
W. St. L. & P.				1		
C. & E. I.						
C. M. & St. P.				13	2	
Wisconsin Central.						
C. St. P. & K. C.				2		
A. T. & S. Fe.				6		
Through & Special.				62	33	8
Total each grade.				1	139	56
Total rye.						202

BARLEY.

Railroad.	Bay Brewing.	2			3	4	5	No Grade.	Total No. Cars by Each Road.
		1	2	3					
C. B. & Q.			6	83		12	9		3,710
C. R. I. & P.				26		15	3		1,724
C. & A.									933
Illinois Central.					11	14	1		2,095
Galena Div. N. W.					8	16	8		1,372
Wis. Div. N. W.			5	76		14			418
W. St. L. & P.									614
C. & E. I.									254
C. M. & St. P.			7	189		67			1,690
Wisconsin Central.	1				1				12
C. St. P. & K. C.						13	2		1,001
A. T. & S. Fe.					1				1,825
Through & Special.									2,202
Total each grade.	1	18	402	151	23				17,850
Total barley.								602	

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at primary markets from July 1 to June 4 during the three last years were as follows:

	1891-92.	1890-91.	1889-90.
St. Louis.	25,608,000	11,355,000	14,062,000
Toledo.	19,565,000	5,534,000	6,134,000
Detroit.	7,330,000	4,686,000	5,158,000
Kansas City.	14,348,000	6,481,000	5,394,000
Cincinnati.	2,381,000	1,165,000	1,505,000
Winter wheat.	69,241,000	29,221,000	32,253,000
Chicago.	45,149,000	13,832,000	18,973,000
Milwaukee.	11,719,000	7,320,000	7,117,000
Minneapolis.	62,320,000	46,815,000	44,259,000
Duluth.	47,079,000	16,871,000	18,063,000
Spring wheat.	166,267,000	84,838,000	88,412,000
Winter wheat.	69,241,000	29,221,000	32,253,000
Total, 49 weeks.	235,508,000	114,059,000	120,665,000

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during May, 1892 and 1891, of seeds, hay and broom corn:

	Timothy lbs.	Clover, lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1892.	1,406,238	185,726	382,366	463,232	493,985	14,865
1891.	2,205,186	463,439	829,160	329,290	801,741	15,729
Shipm'ts.						
1892.	1,364,426	128,747	934,178	735,791	659,114	1,942
1891.	811,541	356,863	1,005,600	532,214	866,725	1,745

VISIBLE SUPPLY OF GRAIN.

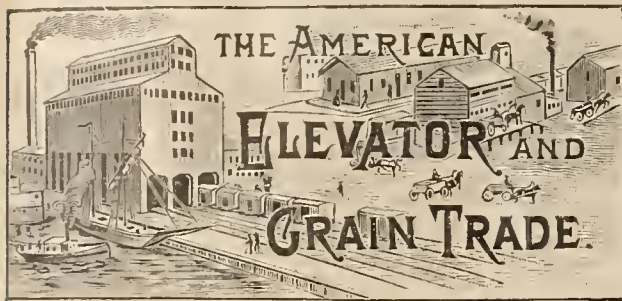
The following table shows the visible supply of grain Saturday, June 11, 1892, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany.		15,000	12,000	8,000	
Baltimore.	864,000	491,000	106,000	31,000	
Boston.	29,000	29,000	48,000	3,000	14,000
Buffalo.	706,000	346,000	57,000	9,000	51,000
do afloat.					
Chicago.	6,506,000	1,418,000	1,052,000	177,000	18,000
do afloat.					
Cincinnati.	6,000			2,000	
Detroit.	92,000	4,000	19,000	2,000	8,000
do afloat.					
Duluth.	4,270,000				
do afloat.					
Indianapolis.	44,000	7,000	33,000		
Kansas City.	307,000	40,000	8,000	4,000	
Milwaukee.	225,000		9,000	40,000	33,000
do afloat.					
Minneapolis.	7,516,000	1,000	1,000		
Montreal.	615,000		582,000	33,000	130,000
New York.	2,645,000	147,000	324,000	91,000	55,000
do afloat.	236,000			11,000	
Oswego.	8,000				10,000
Peoria.	9,000	38,000	64,000	5,000	
Philadelphia.	493,000	267,000	89,000		
St. Louis.	350,000	184,000	89,000	2,000	
do afloat.					
Toledo.	175,000	54,000	64,000	29,000	
Toronto.	98,000		5,000		48,000
On Canals.	712,000	97,000	298,000	8,000	29,000
On Lakes.	674,000	1,461,000	99,000	76,000	
On Miss. River.		6,000	47,000		
Grand total.	26,650,000	4,628,000	3,897,000	531,000	396,000
Same date last year.	15,501,289	4,956,169	4,262,385	294,754	112,487

RANGE OF PRICES AT CHICAGO.

The daily range of prices of grain for May delivery at Chicago since May 13 and July delivery since June 1 has been as follows:

May.	WHEAT.			CORN.			OATS.			RYE.		BARLEY.		FLANSEED.	
	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Closing.	Low.	High.	Low.	High.	Low.	High.
14	82½	83½	82½	47¾	49½	49	29½	30¼	30	75½	75½	48	59	102	102
15	1680¾	81½	81½	47	48	48	29¼	29¾	29½	75	75	50	58	102¼	102¼
16	1751¼	81½	81¼	49	52	52	29½	29½	29½	75½	75½	50	58	103¼	104
17	1880¾	81½	81	51	55	52½	29¼	30½	29½	75½	75½	51	58	105	105¾
18	1981¼	83½	82½	53	55	55	30¼	30½	30½	76	76	51	58	105½	105½
19	2082¼	85½	84½	55	62	61	30¾	32	31½	78	78	50	56	106	106
20	2183½	84½	83½	61½	71	70	31¾	31¾	31¾	78	78	50	56	106½	106
21	2282¼	83½	82½	60	68	62	30½	31½	31	78	78	50	59	104½	...
22	2483½	84¼	83½	62	63	63	31½	33¼	33¼	78	78	50	60	104½	105
23	2583	84¾	83½	65	68	67	32¼	33¼	32¾	78	78	50	60	104	104½
24	2683¼	84	83½	63	67	63	32¼	32½	32¾	78	78	50	58	102	102
25	2783½	84	84	63	70	70	31¾	32	31¾	78	78	50	59	102	102
26	2884½	85½	84¼	75	82	80	31¾	32	31¾	78¼	78	49	56	102	102
27	29														
28	3182¼	85	82¼	48½	100	49½	31	31¼	31½	76	76	55	56	102½	103
29	182¾	83¾	83¼	48	48½	48	31¾	31¾	31½	...	...	55½	58	...	...
30	282¾	83¾	83¾	47¾	48¾	48¾	31½	32	32	65	68	52	56	104½	...
31	383¾	86	85¼	48½	50½	50	31¾	33¼	33	70	...	56	61	105	105¼
1	485¼	87	86½	51	52½	52¼	33¼	34¾	34¾	71	72	50	58	104	104¾
2	584¾	86¼	84¾	49	51¼	49½	32¾	33¾	32¾	65	...	43	56	102¼	103
3	784¾	88	87¾	48½	51½	51	32	34	33¾	...	...	45	57	102¾	103
4	885¼	87½	85¾	49¾	51½	51¼	32¾	35¼	32¾	76	...	38	55	103½	...
5	984¾	86½	85¼	49½	51¼	49¾	32¾	32¾	32¾	81	...	41	56	103¼	...
6	1083¾	85	84	48½	49½	48¾	32	32¾	32¾	75½	...	50	53	104	...
7	1179¾	81½	79½	45¼	47½	45¾	29½	31	29¾	70	...	38	52	103½	...
8	12														
9	1377¾	79¾	79¼	43¼	46¾	46¾	28	30¼	30¼	75	75	40	51	102½	103
10	1478½	78¾	78¼	45¾	46½	46	29½	30	29¾	75	75	35	60	102¼	...



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., JUNE 15, 1892.

PLUCKING THE PARDRIDGE.

The same fate seems to lie in store for every one who aspires to the position of boss of the grain market. For a year Ed Pardridge has been the most prominent figure in speculation in this country. With a large fortune gained in outside business, with large real estate holdings, and a successful record as a Board of Trade speculator, he was admirably equipped to play the role of "boss" that is, if the markets will stand a boss. He is stubborn, as a successful speculator must be, albeit he goes to pieces at times, when thoroughly convinced that the market is against him.

When the recent rise came in wheat and corn, Pardridge was reputed to be short 8,000,000 bushels of wheat and 4,000,000 bushels of corn. These figures are probably exaggerated. At any rate, with the continued wet weather and advancing prices, "Uncle Ed" came to the conclusion that it was best to cover his short line. This he proceeded to do at a loss placed by many at half a million dollars. Perhaps it was not so much as that. At any rate, it need not have been had he only waited until the Government crop report was published. But he had been thoroughly convinced that the market was too strong, and that the more quickly he got out the better.

Pardridge's losses the past month probably take what is left of the profits of the crop year's operations. He lost, it is said, three-fourths of a million last summer and then gathered in more than a million on the decline. He is probably not much, if any, less wealthy now than a year ago. We trust, however, that he has lost any ambition which he may have cherished, to boss the market, and that he is, in consequence, a wiser, even if a poorer man.

And by the way, what becomes of the claims that a big speculator can control the market as

he sees fit? In spite of his enormous short line, the markets went the other way; and *mirabile dictu!* the moment this enormous short interest was got rid of, and the market should have advanced because there was no malign short interest, the market went down. Evidently the reasoning of Farmer Hatch, Senator Washburn and others of their kind on the market question, is seriously at fault. Wheat and corn should have advanced when Pardridge covered. Instead of that, they declined, on the publication of the Government report, showing that the grain market is still the creature of supply and demand.

A CHECK IS NOT CASH.

A decision of considerable importance to grain dealers has recently been rendered by the Court of Appeals at Kansas City in the case of H. F. Hall vs. the Missouri Pacific Railroad Company.

Hall & Robinson sold several carloads of grain to Theodore Nathan, and the invoices and bills of lading were delivered to him in return for his check. The grain was ordered to the Missouri Pacific in accordance with the buyer's shipping instructions. The bank refused to honor Nathan's checks, and the following day he failed. Mr. Hall then demanded possession of the grain from the agent of the Missouri Pacific, but he refused it, claiming that the few hours intervening between the time sale was agreed to and the receipt of the check made the transaction a credit deal, so that the grain was really Nathan's.

In the meantime the grain had been attached. Mr. Hall brought suit for possession in the Circuit Court and won the case. The railroad company appealed and the finding of the trial court was sustained, the Court of Appeals holding that "A check is not payment of a debt, but is only so when cash is received for it. The holder of a check is only the agent of the drawer to collect the money, and if dishonored there is no satisfaction of the debt." About the same decision regarding a check has been rendered by a number of state courts, but we do not know of any case where so unique a decision of a railway agent was involved. The argument that the expiration of a few hours makes a cash sale a credit sale is ridiculous.

DOWNING THE ERIE CANAL.

No possible doubt can exist that the elevator men of Buffalo and New York are in league with the railroads for the purpose of annihilating the Erie Canal as a factor in transportation. Business on the canal was never at such low ebb. Naturally the character of a season has much to do with the grain carrying trade; but this year the boatman's business is practically dead, while the character of the season is such that lively times might reasonably be expected by the boatmen. Last year's crops were enormous and the movement of grain since the opening of navigation has been generous. Boatmen were anticipating a good season and believed that they could readily command 5 and 6 cents per bushel from Buffalo to New York; but rates commenced to decline as soon as the canal opened, and through May averaged hardly 2½ cents. Boats were tied up for miles at Buffalo waiting for cargoes at rates that would even pay expenses; but in vain.

Meanwhile the railroads have been busy. They carried twice as much grain out of Buffalo in May as the boats did. Of course they only did this by carrying grain for less than the boats did. No one knows what arrangement exists between the elevator men and the roads; but it is of course cheaper for grain to go by rail, else it would not do so. The summer railway rate on grain between Buffalo and New York is only a third of what it was last winter. Obviously there is only one explanation of such ruinous competition as this, and that is the purpose of the railroads to destroy the canal. Competition is all right, but there exists no reason for such rates as the railroads have been making unless it be the ulterior object of getting rid of waterway competition permanently. For the rate made by the railroads is one which the boatmen cannot possibly meet and

one which is also unprofitable to the railways themselves. Only by reduction of elevator charges at Buffalo and New York will it be possible for the canal men to stand this competition.

The railways have made every preparation for a fight against the Erie. Heavy rails have been put down, terminal facilities have been increased, and grain cars are now run which can carry twice as much as constituted the regulation load in years gone by. The roadbeds are practically perfect and larger locomotives contribute to the general economy in handling this kind of business. While the railways have thus put themselves in shape to carry grain at the least possible cost, the canal has been neglected. Mud and grass on the bottom prevent the boats from carrying a maximum load. The legislature voted an appropriation for the canal which the governor vetoed.

The outlook for the Erie is very dark. The railroads have the advantage of fighting a lot of boatmen in their individual capacity. They will drop out one by one and none will take their places. When the last boats disappear, up will go the charges on railway transportation, and the public will have to bear the costs which the roads have been at in burying the public's protector.

THE CORN "CORNER."

Chicago witnessed an attempt to corner May corn, which at first excited the alarm and then the ridicule of the people on the board. From the best information obtainable, the corner was not premeditated. The firm of young brokers who manipulated the deal, were acting for New York parties and whatever their original purpose they found after large purchases on an advancing market, that corn was cornered; in fact, corn had cornered itself by the actual scarcity of the contract grade.

It seems that it was then that the firm of young brokers over-estimated the influence of their operations, and determined to put the price up. May corn did actually reach \$1.00; but the amount of contract corn that reached here and was got into the elevators between Saturday and Tuesday noon was too much for them, and the firm went broke and the price went back to the point where it started from.

The mistake the would-be-cornerers made was in not letting the market alone after they found it was cornered. The anxiety of the shorts to cover would have kept the market up and the settling point would probably have been 80 to 85 cents. The market had cornered itself, and the shorts would have kept the market up in covering, if Coster & Martin had not bought a bushel after they found the shorts were unable to cover immediately. They needed to make no more purchases to protect what they had already. They might have made a quarter of a million; but as it was, the shorts got all their money and the firm went into *liq.*, with its hide on the fence as a warning to future would-be-cornerers not to be too greedy.

A RECIPROCAL DEMURRAGE CHARGE.

Grain shippers continue to pay demurrage charges for delaying cars and at the same time bear the loss occasioned by the carrier's delay in transit of their shipments. Of course all admit that this is a lop-sided way of doing business, and some even have the temerity to mildly protest against such unfair requirements, but a united protest or organized stand against this wrong seems to be considered an impossibility by many, especially the traffic managers. We think otherwise, and we trust that our readers will prove that we are not mistaken.

Next month and the month following we will publish a protest and petition to the traffic managers of the railway transportation companies, which we shall ask grain shippers to cut out, sign, and forward to us. It will be a protest against paying the demurrage charge to carriers which do not allow shippers a rebate for the unreasonable delay of grain in transit, and a peti-

tion asking that delay of cars and of grain be governed by the same rules and that the same charges be made for delaying a carload of grain more than 48 hours as is made for delaying a car beyond that time.

The names of the signers will be published as received, and when a number have been received we will send copies of the protest and petition with the names of the signers to the traffic managers of the different railway companies, to the National Transportation Association and to the Interstate Commerce Commission.

THE HATCH BILL PASSES.

As we predicted, the Hatch bill, commonly though incorrectly termed the "Anti-Option bill," passed the House June 6 by a vote of 168 to 46, or 26 more than the necessary two-thirds vote to pass it over the veto of the president, should he refuse to sign it. The bill was passed under a suspension of the rules of the House and only 15 minutes' debate was allowed on each side. In the debate that followed Farmer Hatch repeated all the misinformation he originally had and has acquired; while a few level-headed members like Herbert of Alabama, Patterson of Tennessee and Castle of Minnesota argued against the bill. Mr. Castle denounced the bill as one to depress the price of agricultural products.

The dispatches state that the bill was voted for in sheer terrorism of the "farmers' vote." Congressmen voted for the bill not from a conviction that it was right, but because they were afraid of the farmers.

Congress adjourns on July 4. It is hardly possible that the bill will be acted on by that time, but it may be. If it goes over until next session it will hardly pass, as the people at Washington will be over the ante-election terror which the threat of the "farmer vote" holds out.

"ENLARGEMENT OF THE CANALS AN INTERNATIONAL WORK."

We have received a pamphlet by James Fisher, M. P. P., and published at Winnipeg, in which it is held that the work of enlarging the canals connecting the Great Lakes with the sea should be conducted by the United States and Canada, and the canals made free to the people of both nations. The Canadian Government has deepened the Welland to fourteen feet and is now making the canals of the St. Lawrence system fourteen feet deep, but will not have the work completed for several years.

This friend of the water route wants the two governments to join hands and speedily make all the canals much deeper so that lake vessels can pass through to tide water without breaking bulk. Such improvements would surely prove of incalculable advantage to the West and all states and provinces bordering on the lakes. The completion of these improvements would give a greater impetus to the export trade of the West than any improvement made of late years. The export grain trade especially would be benefited.

The proposition, however, would be fiercely opposed by sentimentalists. The friends of the Erie Canal, the Buffalo and New York harbor elevator pools, and the railroad interests of the country would also do everything in their power to defeat such a deal. We doubt if congress has the power to appropriate money for improving canals in foreign lands. The only proposition for the improvement of the St. Lawrence canals by the United States Government which would meet with the approval of the great majority of the citizens of the United States is that the Canadian Government cede all the Dominion lands on the south bank of the St. Lawrence west of the Lachine Canal to the United States, it to give the canals in this territory a depth of 20 feet, and the Canadian Government to make the Welland and Lachine canals 20 feet deep, all canals to be free to vessels of both countries.

A better way to secure the improvement, however, would be for the Dominion Govern-

ment to charter a company to improve and operate the canals. The Suez Canal pays good dividends, yet the tonnage passing through it annually is much less than would pass through the St. Lawrence canals.

NORTH DAKOTA'S WAREHOUSE LAW.

The Supreme Court of North Dakota has decided that the warehouse law (chapter 126 of the session laws of 1891) is constitutional in so far as it defines public warehouses and cites the decisions of the Illinois, the New York and the United States Supreme Court in support of its decision. Section 4 of the law defines a public warehouse as a house operated for the purpose of "buying, selling, storing, shipping or handling grain for profit." We hold as heretofore that the law does not rightly define public warehouses because houses where no grain other than that owned by the elevator proprietor or operator, is not excluded from the obnoxious restrictions. The word "compensation" or "remuneration" should be substituted for the word "profit" or else the words "of persons other than the elevator proprietor" should be inserted after the word "grain," and before the words "for profit." It was not the intention of the lawmakers to try to regulate the private warehouses, yet as the law now stands, private warehouse men can be put to much trouble. A law which admits of interference with the business of a private warehouseman is not constitutional, the decision of the court to the contrary.

Section 11 of the act fixes the charge for receiving, elevating, insuring, delivering and twenty days' storage at two cents a bushel and one-half cent for each succeeding fifteen days or part thereof, provided however, that the charge shall not exceed five cents for six months. These charges would prove unprofitable, and the court seems to have recognized this fact, for it states in its decision "that the record does not raise the question of the adequacy of the rate of charges, hence the case is not one which calls for a decision of the point whether the court would in any case assume to review a rate of charges where it was shown that such rate was ruinously small." The case will probably be appealed to the United States Supreme Court. In the meantime, the elevator men of North Dakota may avoid the stringent regulations of the unjust law by refusing to operate their houses as public warehouses. They can not be compelled to do so, laws and judges notwithstanding.

TRANSFERRING FACILITIES AT TERMINALS.

Elsewhere in this issue we publish a number of letters from gentlemen connected with the grain trade of cities where grain is transferred from car to car, in which it is shown that the modern grain transfer elevator is not used at one of these points. Instead of striving to secure improved methods, those engaged in the transferring of grain seem to be determined to hang onto the old methods, although the trade has outgrown them long since.

It seems extremely ridiculous that in this country where the facilities for handling grain have reached a higher degree of perfection than anywhere else, we should still use methods in use when the grain trade was in its infancy. Yet at every important inland railroad terminal, grain is transferred from car to car by shovels. Grain handlers of the whole world look to this country for improved methods, and this is a sample of our boasted advancement which must be shown them. In some places carriers have gone to the great expense and trouble to construct an elevation for the loaded ear so as to make it easier for those shoveling out the grain, but just as much grain is blown away and damaged by rain and snow as when tracks are on the level.

At most terminals the old-time methods are still used, and carriers will continue to so transfer

grain as long as they are permitted to do so. The prompt delivery of grain at destination is one thing to which they have not yet given much thought and will not until the grain receivers' associations at different terminals demand it.

Every railroad should have a first-class grain transfer elevator at its Western terminal, and if grain shippers will persistently demand the construction of such houses, they will be built. Then will grain be transferred under cover, none stolen, blown away or damaged by rain, snow or sleet. The contents of each car will all be emptied into another, and a small part of it will not be sold to sweepers, or mixed with the contents of another. Correct weights will be the rule, and unreliable track scales will not be used.

PURE NERVE.

Ex-Governor Pillsbury of Minnesota was a delegate to the Republican National Convention and was awarded the palm for the best and most varied display of nerve. It is well-known that in all such gatherings resolutions and platform planks are referred to the committee on resolutions without being read or debated. Were it otherwise there are always sufficient people present with hobbies to take up a full month airing their views. At Minneapolis the usual resolution had passed that everything pertaining to the platform be referred to the committee without being read or debated. Nevertheless Mr. Pillsbury arose in his place, sent up a resolution endorsing the Hatch Anti-Option Bill and demanded that it should be read. This display of nerve in behalf of the Minneapolis millers surprised the convention into momentary silence; but almost instantly a hundred protests against this nervy exhibition were heard, and Mr. Pillsbury's resolution endorsing Farmer Hatch's Bill was referred to the committee and buried along with a dozen other brilliant suggestions.

SHORTAGES DUE TO TRANSFER IN TRANSIT.

Shortages in car grain arriving at New Orleans from Kansas City have recently caused much loss and trouble, a few uncomplimentary remarks by those concerned, and last but not least, a thorough investigation by a committee composed of interested persons from each city. Of course no one was stealing grain—it was merely a discrepancy in weights, amounting from 30 to 50 bushels per car.

However, the interested parties sought a remedy for the evil in the right way. They consulted with one another and found that shortages occurred only in shipments transferred in transit. Carloads sent through without the seal being broken gave no trouble. The committee reported that the shortages were due largely to careless transferring, and recommended greater care. We have seen some of this careless transferring, and as in the present case, the men in charge of the work were frightfully careless. Of course it requires an extreme degree of carelessness to cause a shortage of 40 bushels to a car, but it comes easy to some of them.

At the Chicago & Erie transfer elevator in Chicago the men are so careless that much grain falls into regular grain sacks provided for that purpose and never gets into the car of the Eastern road. When the Chicago & Atlantic Railroad Company had charge of this traveling transfer elevator the men in charge were even more careless. They had a flat car running along behind the car and these filled sacks would accidentally fall on that car in large numbers. It is probably the same kind of carelessness that has caused the shortages between Kansas City and New Orleans. Discharge, arrest, conviction and imprisonment is the best remedy for this kind of carelessness.

CLIPPING coupons is a pleasant and profitable work, but no more so than clipping the protest and petition out of next month's AMERICAN ELEVATOR AND GRAIN TRADE. If all our readers do this, it will prove exceedingly profitable.

EDITORIAL

MENTION

WIND and rain have, during the last two days, done much damage to cribs and corn throughout the Central states.

WHY did prices go down when the news came that the Hatch Bill had gone through the House by a big majority?

A QUANTITY of No. 1 Northern was reported out of condition in a seaboard market recently, but did not cause much excitement.

CHICAGO had a wind storm June 13. Wind was a drug in the market, and the short sellers were overcome with joy. Wheat is declining.

THE Illinois Grain Merchants' Insurance and Protective Society held its annual meeting for the election of officers at Springfield, Tuesday, June 14.

THE Board of Trade of West Superior, Wis., has appointed a committee to hire an inspector asked for by the local dealers. The Minnesota grades are still used.

THE Iowa State crop bulletin of June 14 reports weather for past week very favorable for growing grain, cultivation and planting. Prospects for good crop greatly improved.

TWO prominent members of the Chicago Board of Trade made a bet of \$500 that the Hatch bill will not become a law. The boys will take a whack at "futures" whether they be events or prices.

HATCH'S Bill puzzles the Senate and the learned senators do not know what committee to refer it to. It relates to agriculture, revenue and interstate commerce, and its fate may be decided on by the committee it chances to go to.

SPECULATORS who objected so strongly against comment by Statistician Dodge in the Government's monthly crop report are now wishing that they hadn't done so. Now that his opinion can not be obtained it is considered of much value.

KIDD'S Portable Steel Elevator made by J. S. Kidd of Des Moines, Iowa, is meeting with success as a stationary as well as a portable machine for handling ear corn and other kinds of grain. No pit is required, so water never interferes with its operation.

SOME of the Canadians think that should the Hatch Anti-Option Bill become a law, speculative trading in grain will take up its abode in Canada. This is hardly possible, and such a belief shows a lack of comprehension of the *rationale* of grain speculation.

HUNDREDS of our readers sell coal in connection with their grain business. Those who are interested in this branch of business should notice the card of the Newell Coal Company of Peoria, Ill. They are miners, mine agents and shippers, handling coal and coke, and are excellently situated to supply the trade.

THE enterprising railroad company referred to in our last issue has run another train through to the seaboard from Chicago without break or change of engine. The company is now only experimenting, and the permanent arrangements it will make depend upon the results. An officer

of the company writes us: "We hope to make some improvement in this service which will be alike satisfactory to the shipper and the railroad."

THE authors of the "Hold your Wheat" circular can obtain free passage to the Moon Mountains by applying to numerous farmers all over the country who are still holding for a slight advance. By establishing identity these same authors will be given a banquet by many grain dealers who wanted to buy wheat but couldn't.

THE new elevator of the Boston & Maine Railroad at Boston, Mass., will have in use nine No. 8 Monitor Separators, the order for same having been placed with the manufacturers, Huntley, Cranson & Hammond, Silver Creek, N. Y. The combined maximum capacity of these machines will be 22,500 bushels per hour, or 540,000 bushels per day.

THE Central Traffic Association advanced the freight rates on grain and grain products, June 13. Its special commodity tariff taking effect that day provides that the rate per 100 pounds in carloads to New York shall be 22½, Boston 27½, Philadelphia 20½, Baltimore 19½, Albany 22, Binghamton 20½, Buffalo, Pittsburg and Wheeling 13½ cents.

CITIZENS of Erie, Pa., are making an organized move to secure a larger share of the lake trade, and the citizens of Philadelphia and the Philadelphia & Erie Railroad Company are doing much to induce Western grain shippers to send their grain to Philadelphia via Erie. By this route shippers will escape the elevator pool at Buffalo, and secure just as satisfactory service.

"FOR SALE" is the title of a department published each month in the back part of this journal for the exclusive use of those wishing to sell elevators, elevator sites, machinery, business or anything else of use to our readers. This is the only medium that circulates exclusively among those connected with the grain trade, so it is obvious that an advertisement of such articles placed in it will give far better results than if placed anywhere else. Try it.

LAST month we announced that the all-rail rate on grain to the seaboard had been reduced five cents a hundred, and now we have to announce that the rate has been advanced to a basis of 22½ cents per 100, Chicago to New York. Shippers who had sold to deliver at eastern points will be delighted. If the rates continue to vary dealers will have to make all sales f. o. b. at point of shipment or amend all contracts by making them subject to change in rates.

ON June 1 the well-known firm of H. W. Caldwell & Son changed its style to H. W. Caldwell & Son Company. The business and management remain the same. Henry W. Caldwell is president, and Oliver N. Caldwell secretary and treasurer of the company. The headquarters are at the same place, 127 to 133 West Washington street, Chicago. The business of the concern, as general machinists, has increased surprisingly in the last couple of years, an increase fully justified by the character of the work which has been turned out.

A JOURNAL devoted to the interest of the lake marine says: "Some of the grain shortages for which vessel owners have had to go down in their pockets is now accounted for," and maliciously tries to carry the impression, although it has not the courage to state plainly that the report of the Minnesota Investigating Committee showed that the 315,000 bushels of grain shipped from Duluth in an irregular manner was taken from cargoes prepared for shipment by lake. The report showed nothing of the kind, and the editor of the *Marine Record* knows that the elevator proprie-

tors paid for that damaged grain at the market price of contract grade wheat. Most of the lake vessel owners are also aware of that fact, and if the editor of their organ expects to advance the interest of his sheet by lying to them he will surely fail ignominiously.

ERIE canal boatmen held a meeting recently and appointed a committee to wait upon the members of the Buffalo elevator pool and petition them to reduce the charge for transferring grain. They will never do it until they are compelled to, and the only salvation for the Erie boatmen is to organize a stock company and construct floating elevators of their own.

LOUISVILLE grain dealers, as well as other shippers of sixth class freight, are protesting against the advance in rates. The reduced rate on sixth class freight had hardly gone into effect when an advance was announced. Changeable rates are detrimental to any line of business, and especially so to the grain trade. The margin of profit is so small as to be frequently wiped out by an unlooked for advance in freight rates. Steady rates are necessary, and dealers, when in convention assembled, will do well to resolve against frequent changes.

THE Ohio Grain Dealers' Association accepted an invitation of transportation companies to visit Alderson, W. Va., and on the morning of June 9, seventy-five members left for that place. The association held a meeting, elected new officers and disposed of the business presented. Heretofore the annual trip of the association has been to Sandusky and Put-in-Bay, and the principal amusement fishing. Not one member of the association has told a fish story, to believe which was impossible. They always have a pleasant time, and undoubtedly enjoyed themselves this year.

A SHORT time ago Nebraska grain dealers organized an association, and now the farmers' elevator companies of the state are making an effort to organize an association. So it is evident the grain handlers of that state are convinced of the advantages of organization. On June 8 and 9 a number of grain shippers and representatives of farmers' elevator companies held a meeting at Lincoln to compare notes, consult with one another regarding the best methods of conducting their business and protecting their interests. The meeting was called by the president of the company at Tobias, Neb.

THE agent of the Agricultural Department sent to Europe to induce foreigners to use corn as food is meeting with very flattering success in Germany. The exports to that country have been greatly increased, and the demand is continually increasing. Already thirteen mills have been equipped with machinery for grinding corn, and in Dresden more than half the bakers are making and selling bread made of one part corn and two parts rye. The German Government will soon issue a favorable report on the value of corn as food, so the prospects for displacing rye in that country are not unfavorable.

THE Buffalo railroad elevator pool has made another strike at the Erie Canal by having the floating transfer elevator "Cyclone" removed from the river as an obstruction to navigation, and towed to a shallow basin. All the other floating elevators at Buffalo are either owned or kept in idleness by the pool, and the storage elevators charge seven-eighths of a cent per bushel for transferring. The charge for transferring in the state is limited by law to three-eighths of a cent per bushel, and this rate was charged by the "Cyclone." The storage elevators evade the law by refusing to receive grain for transfer, and charge one-fourth of a cent for ten days' storage or any part thereof. The proprietors of the "Cyclone" have had a great many difficulties placed in their path by the pool, the least of

which is not the last, so we feel confident they will soon overcome this one as they have others. For some time most of the grain transferred to canal boats has been handled by the "Cyclone," and its removal has caused the loss of much business to the boatmen.

THE Boston Chamber of Commerce has called the attention of the Interstate Commerce Commission to the fact that 3 cents of the 25-cent rate on grain to New York is used for delivery from railway terminus to docks and warehouses, and that the amount charged and received for actual transportation is 22 cents against 30 cents per hundred to Boston, where no such delivery is made. The Chamber maintains that in fixing a relative tariff to Boston the Commission should use 22 cents as the basis instead of 25. If the Commission does this, which seems right and just, the rate to Boston will be materially reduced.

WITH this issue we complete the tenth volume of the AMERICAN ELEVATOR AND GRAIN TRADE. Of the ten volumes published, each, we think, has been better than the one which preceded it, and with the eleventh volume we hope to excel all others. We are convinced that the journal is of much value to readers by the prompt renewal of old subscribers at the expiration of their subscriptions. It is our earnest desire to make this journal of as much value to the trade as is possible, and we will consider it a great favor if any of our readers will inform us of any changes or new features which they think would improve it.

G. H. WALSH of North Dakota's Railroad Commission has announced that he will have introduced at the present session of the state Legislature bills providing for the amendment of the state inspection and warehouse laws that will be constitutional, and that will bring the elevator men to time. The chief characteristic of some of the state officials in the Northwest seems to be an irresistible desire to lord it over those engaged in handling grain. So far they have overreached themselves and enacted many unconstitutional laws. It is likely that the cranks will do the grain producer more harm than the handlers, with their irrational laws.

ONCE again the effort of the Detroit Car Service Association to charge demurrage for grain cars delayed more than 48 hours has failed. It proposed to charge demurrage for cars loaded with grain, but not those loaded with coal, lime, old bones, scrap iron and other important articles. The change was opposed so effectively that now bulk grain is allowed to remain two days on storage track without charge in addition to 48 hours allowed for unloading. This is reasonable, but should not be agreed to by shippers unless the transportation lines agree to allow a like charge for delaying grain in transit more than four days in excess of the schedule time of their trains.

DURING May we exported breadstuffs valued at \$19,410,394, against \$12,330,231 in the preceding May; and for the eleven months ending with May, \$272,476,023, compared with \$109,956,984 for the corresponding period of 1890-91. Of wheat we exported during May 10,127,124 bushels, against 6,286,987 bushels during the preceding May; while for the eleven months we exported 143,538,001 bushels, valued at \$148,423,648; against 47,405,391 bushels, valued at \$43,284,475, for the eleven months ending with May, 1891. Our corn exports were 5,859,293 bushels in May, against 1,921,701 bushels in May, 1891; and 70,753,137 bushels, valued at \$38,044,295, in the eleven months, against 27,090,094 bushels, valued at \$15,243,787, in the eleven months ending with May, 1891. Oats exports amounted to 1,211,674 bushels in May, against 17,636 in May, 1891; and in the eleven months, 8,772,996 bushels, valued at \$3,589,750; against 897,406 bushels, valued at \$378,327 in the eleven months ending with May, 1891. The exports of

rye during the eleven months ending with May were 11,424,619 bushels, valued at \$10,916,591; against 322,912 bushels, valued at \$203,411, during the corresponding period of 1890-91. The barley exports in the eleven months were 2,741,713 bushels, valued at \$1,722,168; against 853,876 bushels, valued at \$588,604 in the corresponding period of 1890-91.

ILLINOIS, some may be surprised to learn, has an anti-option law almost like the Hatch bill, except the revenue feature. It has rarely been invoked in questions relating to grain and stocks. Once, however, it was successfully appealed to. This was in the sale of the North Chicago Street Railway Company. Two Chicago gentlemen held a contract for the purchase of the stock of the company at a given figure and within a given time. Nevertheless, before the limit expired, the road was sold to other parties. The parties who held the contract sued, but the Supreme Court held that the law of the state rendered the contract, and every other option contract, void.

THE Canadian canal toll question is still unsettled, and the prospects for a settlement do not seem to have been improved, although two representatives of the Dominion Government visited Washington recently and held a conference with Secretaries Blaine and Foster, who held that the refusal to grant the same rebate on grain transhipped at American ports as on that transhipped at Canadian ports was a discrimination against citizens of the United States. The Canadian ministers maintained that it was a discrimination against the American route and not against a nationality. If Canada is anxious to extend its trade, as the ministers say, it can greatly increase the grain trade of Montreal by giving the rebate on all grain passing through the canals to that city regardless of where it is transhipped.

SCREENINGS.

A hen at Guide Rock, Neb., climbs a flight of winding stairs to the top of a grain elevator to lay her daily egg.

The reports of big winnings by grain speculators are among our most popular cereal stories.—*Washington Star*.

They have a brand of whisky in Kentucky known as the "Horn of Plenty," because it will corn you copiously.—*Texas Siftings*.

Chicago grain speculators allege that Moses (he of the bullrushes) now and then speculated in grain. Theirs is certainly a time-honored calling.

One reason why the grain commission man should not speculate on the market is because successful speculation is "bred in the bone," it is not "in the grain."

It is often the case that the man who fiddles for the amusement of others, has a wife whose only music is that made by scraping the bottom of the flour barrel.

"Do you think the Chicago wheat speculators are making game of Partridge?" asked the Snake Editor. "Quite likely," replied the Horse Editor. "They seem to have made him quail."

"Watah is a good thing," remarked Colonel Bludd of Kentucky. "Wall, may be so," replied conservative Major Bowie. "It is true, sah," continued the Colonel. "Rain makes cawn, sah, and cawn makes whisky."—*Life*.

He was a Chicago grain speculator, and for a year past nothing had been coming his way except expenses. Misfortunes never flock by themselves. One day his daughter informed him in a cold and unfeeling manner that if he did not give her a diamond tiara worth at least \$1,500 spot cash she would elope with the coachman. "Come to my arms, my darling child," he exclaimed, as the tears of joy coursed down his wrinkled cheeks; "come to my arms." "Do I get the tiara?" she asked, hesitating ere she accepted his invitation. "Of course not," he smiled delightedly; "you get the coachman. I owe him eight months' wages." That ended it.—*Detroit Free Press*.

Grain Dealers' Associations.

STATE GRAIN DEALERS' ASSOCIATION OF TEXAS.

President, S. J. McENNIS, Dallas; *Vice-President*, E. EARLY, Waco; *Treasurer*, J. P. HARRISON, Sherman; *Secretary*, G. D. HARRISON, McKinney. *Directors*, J. F. McENNIS, J. P. HARRISON, E. EARLY, S. E. McASHAN of Houston and C. F. GIBBLE of Sherman.

NEBRASKA GRAIN DEALERS' ASSOCIATION.

President, C. H. FOWLER, Omaha; *Vice-President*, W. H. FURGESON, Hastings; *Treasurer*, N. A. DUFF, Syracuse; *Secretary*, F. C. SWARTZ, Omaha; *Directors*, C. H. FOWLER, W. H. FURGESON, N. A. DUFF, H. O. BARBER, F. L. HARRIS, G. W. WIRT, J. W. PERRY, J. A. CONNOR and F. C. SWARTZ.

GRAIN SHIPPERS' ASSOCIATION OF NORTH-WEST IOWA.

President, T. M. C. LOGAN, River Sioux; *Vice-President*, H. HANSON, Odebolt; *Secretary and Treasurer*, F. D. BABCOCK, Ida Grove; *Assistant Secretary*, F. G. BUTLER, Schaller. *Executive Committee*, E. A. ABBOTT, Des Moines; J. Y. CAMPFIELD, Sac City, and T. M. CATHART, Kingsley.

GRAIN DEALERS' AND MILLERS' ASSOCIATION OF THE CUMBERLAND VALLEY.

President, S. C. WAGNER, Newville, Pa.; *Secretary*, JOHN A. MILLER, Oakville, Pa.; *Treasurer*, D. H. MILLER, Oakville, Pa.; *Executive Committee*, J. K. BEIDLER, Oakville, J. W. SHARPE, Newville; U. G. BARNITZ, Barnitz; H. K. MILLER, Huntsdale, and J. H. BRINKERHOFF of Walnut Bottom, Pa.

ILLINOIS GRAIN MERCHANTS' INSURANCE AND PROTECTIVE SOCIETY.

President, H. C. MOWREY, Forsythe; *Secretary and General Manager*, S. K. MARSTON, Onarga; *Vice-President*, EDWIN BEGES, Ashland; *Treasurer*, E. R. ULRICH, JR., Springfield. *Executive Committee*, E. F. NORTON, Tallula; F. M. PRATT, Decatur; T. P. BAXTER, Taylorville. *Committee on Claims*, W. B. NEWBIGIN, Blue Mound.

GRAIN DEALERS' ASSOCIATION OF OHIO.

President, E. C. WAGNER, Columbus, Ohio; *Vice-President*, E. M. BENNETT, JR., Urbana; *Secretary*, E. W. SEEDS, Columbus; *Treasurer*, J. W. McCORD, Columbus. *Board of Managers*, J. C. HANNUM, Duvals; J. W. JONES, Radnor; J. P. McALLISTER, Columbus; J. W. WOLCOTT, Conover, and N. R. PARK, Ada. *Legislative Committee*, J. W. McCORD, D. McALLISTER, E. W. SEEDS, E. C. WAGNER, W. A. HARDESTY, and E. C. BEACH.

"SERIOUS AND DISGRACEFUL."

It has been for some time evident that the powerful railroad corporations of the state are united and have determined to annihilate the Erie Canal. In that they have been greatly aided by the present Governor who, after recommending liberal appropriations for the improvement and maintenance of the Erie Canal, promptly vetoed those appropriations when they were made. The railroads can in winter charge just what they please for carrying grain from Buffalo to New York. In the summer they have to shape their prices on the basis of canal competition. Their purpose is to abolish the canal competition by cutting rates so that canal traffic shall be made unprofitable and the canal be allowed to fall into disuse. The disgraceful condition into which the political mismanagement has allowed that channel to fall is evident everywhere. The canal is so filling up with mud, and the growth of aquatic weeds in it has become so great, that the boats are compelled to take less than full cargoes, in order to get through. The boatmen are driven to desperation. In addition to that, the Buffalo elevator pool plays into the hands of the railroads and against the boatmen. The situation is a serious and disgraceful one. Just how the situation is to be bettered it is not easy to see. The railroads are united and powerful, and are willing to sacrifice present profits in order to secure greater gains in the future, when, with the canal out of the way, they shall have absolute control of the traffic between Buffalo and New York.—*Milling World, Buffalo*.

ELEVATOR AND GRAIN NEWS

Clayton, Kan., wants an elevator.
Colgate, Wis., is to have an elevator.
Sberman, S. D., wants a grain dealer.
An elevator is talked of at Hamilton, Ia.
Sunderland, Neb., is to have an elevator.
Evansville, S. D., wants a starch factory.
Downs, Kan., is building a 10,000-bushel elevator.
Another elevator is to be built at Moosomin, Assa.
A starch factory is talked of at Coupeville, Wash.
Pittsford, Mich., wants additional elevator facilities.
Ole Rierson is building a granary at Moorhead, Minn.
A 25,000 bushel elevator is planned at Belgonie, Man.
J. H. Gibson will build a cotton-seed oil mill at Calvert, Tex.
A grain elevator is being built at Columbia Falls, Mont.
An oil mill is wanted at Watertown, S. D., to crush flax seed.
W. H. Lunt & Co., grain dealers at Doon, Ia., have sold out.
Duluth and Superior shipped in May 8,790,000 bushels of wheat.
Charles Ludwig is building a brewery at Chambersburg, Pa.
A grain elevator is wanted at Constantine, Mich., on the railway.
The new grain elevator has been completed at Springfield, Minn.
The roof has been placed on the new elevator at Galveston, Tex.
A malt house is being built at Phelps, N. Y., by J. Q. Howe's Sons.
V. S. Wright & Co., grain dealers at Denver, Colo., have sold out.
An elevator of 50,000 bushels' capacity will be built at Glenboro, Man.
A 10,000-bushel elevator and flour mill will be built at Rushville, Neb.
Sackett & Fay are building a 30,000-bushel elevator at St. Peter, Minn.
Charles Schram is about to build a grain warehouse at Martinsburg, Neb.
The elevator at Verona, Neb., is doing a rushing business receiving grain.
Citizens of Guthrie, Oklahoma Ter., talk of building a large grain elevator.
H. F. Fisher is building a 70,000 bushel grain warehouse at Peoria, Ore.
The starch factory at Nebraska City, Neb., uses 800 bushels of corn daily.
The elevator at Ridgeway, Mich., takes in a thousand bushels of grain daily.
D. Parent & Co., dealers in grain, hay and coal at Montreal, Que., have failed.
Business men of Sterling, Arenac Co., Mich., talk of building a grain elevator.
F. U. Bressler & Co., grain dealers at Albany, N. Y., has dissolved partnership.
C. A. Whitney & Co., dealers in grain and lumber at Larose, Ill., have sold out.
A large elevator is being built at Seymour, Ind., by the Blush Milling Company.
A syndicate of farmers proposes to buy the Morton Elevator at Boissevain, Man.
Denis & Duracher, dealers in grain and flour at St. Hyacinthe, Que., have failed.
The grain buyers of Miner Co., S. D., shipped a million bushels of grain last year.
A malt house is being built at Davenport, Ia., by the D. Rothschild Grain Company.
Jas. S. Rowe, the grain dealer of Wilton, Ia., has placed a feed mill in his elevator.
Messrs. Wahls & Anuman have bought the grain business of M. Collins at Peotone, Ill.
The farmers of Mission and Serena have completed their new elevator at Sheridan, Ill.
The Farmers' Elevator Company of Thornton, Ia., has recently given the contract for erecting a new house to

J. A. Campbell & Son, designers and builders of elevators at Lincoln, Neb.

The Stein Brewing Company has been incorporated at Louisville, Ky., with \$50,000 capital.

E. W. Lockwood & Son, grain dealers at Nevada, Ia., have been succeeded by R. A. Frazier.

Wells & McCardell, dealers in hay and feed at Baltimore, Md., have dissolved partnership.

Steel & Campbell, dealers in grain and flour at Montreal, Que., have dissolved partnership.

The Pinters' Independent Oil Company will build a cotton-seed oil mill at Little Rock, Ark.

A farmers' elevator will be built at Roland, N. W. T., west of Morris, on the Northern Pacific.

Newell's elevator at Lstant, Ill., has been equipped with a gasoline engine of 16-horse power.

Morris, Steele & Hindson, dealers in grain and hay at Helena, Mont., have dissolved partnership.

A 50,000-bushel elevator is being built at Jefferson City, Mo., by the Dulac Milling Company.

The new elevator at Brown City, Mich., is approaching completion. Its capacity is 20,000 bushels.

C. S. Parmle and F. Bruen, of Minneapolis, Minn., have started in the grain and feed business.

J. Allen Smith & Co. of Knoxville, Tenn., are repairing their elevator recently damaged by fire.

I. E. Haviland of Delphi, Ind., has sold his elevator to Vangundi, Donnil & Co. of the same place.

The construction of a grain elevator is proposed at Milford, Mich., on the E. & P. M. Railway.

D. J. Dillon, dealer in grain and hay at Bruuswick, Ga., has been succeeded by Dillon & Wentz.

The Flatonia Oil Mill Company has been incorporated at Flatonia, Tex., to build a cotton-seed oil mill.

Threshing machines have resumed work in Manitoba. A lively movement of grain is just commencing.

Francis Ampler, grain dealer at East Braintree, Mass., has bought the "Hobart Grain Mills" for \$8,500.

The Russell-Dolman Grain Company has been incorporated at Toledo, O., with \$10,000 capital stock.

The elevator at Wedron, La Salle Co., Ill., which was recently burned, is being rebuilt by Sanders Bros.

J. R. Gill & Son, dealers in grain and produce at Prairie City, Ia., have been succeeded by J. R. Gill & Co.

The Campbell Commission Company of Chicago has increased its capital stock from \$100,000 to \$125,000.

A big starch factory will be built at Des Moines, Ia., by the trust, to consume 4,000 bushels of corn daily.

The Brocton Elevator Company at Newman, Ill., received 17,000 bushels of corn in the week ending May 21.

L. Moody does a grain and wool business at Arlington, Ore., which town shipped a million bushels of wheat in 1891.

James Hancock has been admitted to the firm of Hancock & Co., grain commission dealers at Philadelphia.

W. J. Whipple and H. A. George, of Minneapolis, talk of building a million bushel elevator at Duluth, Minn.

After a struggle of six years the "Farmers' Elevator" at Henning, Neb., has been paid for and is making a small profit.

Green & Co., grain dealers at Summittville, Ind., have been succeeded in the elevator business by Gordon & Fulton.

An elevator of 150,000 bushels' capacity will be built, it is said, at Kansas City, Mo., by Hayward & Co., grain dealers.

O'Neill & Kerr, dealers in grain and lumber at Burt, Ia., have been succeeded by the Wrightman & Richards Company.

Babcock & Campbell expect to build an elevator at Northfield, Minn., on ground owned by the C., M. & St. P. Railway.

J. M. Jenks & Co. of Port Huron, Mich., shipped 500 cars of grain to Eastern points in twenty-four days ending May 25.

C. A. Lundy & Co., grain dealers at Pomeroy and Port Angeles, Wash., have sold their business at the latter place.

A large grain elevator may be built at Prescott, Ont., opposite Ogdensburg, N. Y., to transship lake grain into river barges.

Culp Bros., the new grain firm at South Solon, O., are doing a good business. They received 3,000 bushels of corn May 18.

An elevator will be built at McCandless station on the B. & M. Railway in Nebraska between Shubert and Nemaha City.

The floating elevator Cyclone which has been moored in the river at Buffalo, N. Y., while transferring grain from vessels to canal boats at a dock leased by its owners,

was on June 2 moved by the harbor-master out into the basin on the ground that it was an obstruction to navigation.

Fifteen carloads of cotton-seed meal were sent out recently in one shipment from the cotton-seed oil mill at Honey Grove, Tex.

Winnipeg, Man., received 174 cars wheat in the three weeks ending May 21, against 191 cars in the corresponding weeks last year.

Holmquist & Co., dealers in grain and lumber at Oakland, Neb., have been succeeded by the Holmquist Grain & Lumber Company.

A stock company is about to build a grain elevator at East Rock, near New Haven, Conn. L. J. Matthews is one of the promoters.

The farmers' elevator at Sheridan, Ill., has passed into private hands, and John Anderson has bought a majority of the shares of stock.

William Hill, grain dealer at Fountain City, Va., has handled more than \$100,000 worth of grain in the six months ending June 1.

Buffalo received 26,500,000 bushels of grain from the opening of navigation to June 1, against 16,000,000 in the same time last year.

Duluth shipped 3,600,000 bushels of wheat in the week ending May 18, the largest amount ever shipped from that port in a single week.

The Farmersville Cotton Oil Company has been incorporated at Farmersville, Tex., with \$30,000 capital to build a cotton-seed oil mill.

H. H. Steel of Golden City, Mo., has bought a complete elevator outfit of the Barnard & Leas Manufacturing Company of Moline, Ill.

Case & Co., grain commission dealers at Joliet, Ill., failed June 6. J. W. Christie, a member of the firm, has departed, leaving heavy debts.

The erection of a large elevator has been proposed to give Kingston, Ont., facilities it needs for transferring grain from lake vessels to barges.

Harvey Bros & Billings, grain dealers at Cobb, Iowa Co., Wis., shipped over 8,000 and received over 10,000 bushels of oats in two days recently.

The Givanovich Chapin Oil Company has been incorporated at Nachitoches, La., to build a cotton-seed oil mill and manufacture oil. Capital \$15,000.

The ruins of the "Marine Elevator" at Oswego, N. Y., are being cleared away so that the great heaps of half-burned corn and barley may be reached.

Exports of Canadian grain at present consist chiefly of barley and other coarse grains, the price of wheat in Europe being too low for profitable export.

In April Philadelphia exported 2,805,181 bushels of corn, New York 1,451,965 bushels, Baltimore 1,795,928 bushels and New Orleans 1,758,291 bushels.

J. D. Israel is the grain buyer at Weston, Ore., a town which shipped in 1891 fifty cars of oats and barley, fifty cars of hay and 350,000 bushels of wheat.

Jacquot & Kelly and Wilson Bros. & Co. of Merna are putting in new machinery furnished by the York Foundry and Engine Company of York, Neb.

The firm F. A. Crittenden & Co. of the Chicago Board of Trade was caught short on corn in the risc and failed May 20. The amount involved is small.

At the time of the high water in the river the elevators at St. Louis had great difficulty in loading barges. For several days no grain could be loaded into barges.

The Red River Oil Company has been incorporated at Alexandria, La., by Messrs. Seip & Welche and others, with \$150,000 capital, to build a cotton-seed oil mill.

The Central Elevating Company, which was recently organized at Buffalo, N. Y., has all its capital paid in, and is ready to build. W. P. Northrup is president.

A grain man at Downs, Kan., has recorded a solemn vow in heaven never to let another carload of corn go out of that town for less than twenty cents a bushel.

H. C. Smith of Benedict has just purchased a complete outfit of elevator machinery with power from the York Foundry and Engine Company of York, Neb.

J. A. Campbell & Son of Lincoln, Neb., designers and builders of grain elevators, have recently closed a contract to build an elevator for Powell Bros., at Danbury, Neb.

The Empire Grain Company has been incorporated at Sherman, Tex. Capital stock, \$50,000; incorporators, Paul Waples, H. J. Hall, A. F. Plateer and C. B. Wandelohr.

The Columbia Elevator Company has been incorporated at Minneapolis, Minn. Capital stock \$100,000; incorporators, J. F. Whallon, G. V. Edwards and P. W. Barton.

The first of the through grain laden trains sent from Chicago over the Pennsylvania Railroad to Philadelphia was loaded by Boyden & Co. and consigned to Geo. E. Bartol & Co., at Philadelphia, where the whole train load was inspected in forty minutes and all graded No. 2 mixed corn. The forty cars contained 50,000 bushels,

which is nearly half as much as our big lake steamers carry.

The first shipment of this year's wheat crop in California was made May 21 from Poso, Kern Co., to San Francisco, four days earlier than last year.

Oscar B. Hillis, clerk of the United States Circuit Court at St. Paul, Minn., sold by auction at Minneapolis June 3, a number of elevators in Iowa, Minnesota and Dakota.

A. W. Fallgatter & Co., of Parker, S. D., will move their headquarters to Minneapolis, Minn. They operate elevators in Iowa and Dakota along the C. & N. W. Railway.

A number of grain buyers who have been laid off work during the past two months returned this week, June 6, to their different stations to buy grain.—*The Commercial, Winnipeg.*

Van Valkenburg & Son of Sutton are overhauling their elevator and are putting in new belting, cups, etc., furnished by the York Foundry and Engine Company of York, Neb.

Clark, Heaton & Co. of Weston, Neb., have awarded the contract for building their new elevator to J. A. Campbell & Son, the elevator designers and builders, of Lincoln, Neb.

Carload receipts of grain at Buffalo have fallen off very materially. The decrease much exceeds that which usually occurs after the opening of navigation, says Grain Inspector Ball.

A number of additional elevators will be built in Manitoba by the Lake of the Woods Milling Company, of Keewatin, Ont. The company will buy grain to export as well as to mill.

The C. E. Lathrop Grain Company of Atchison, Kan., had three cars of corn in Chicago when the corner was run, which were sold at \$1 a bushel just before the price dropped to 49 cents.

The New York, Ontario & Western Railroad Company will build a 400,000-bushel elevator at Oswego, N. Y. The building will be of iron and steel, not a single stick of timber being used.

John M. Bedford, as manager of the Sherman elevators at Buffalo, N. Y., has got a verdict for \$268,516 in his suit against Sherman Bros., recently heard in the State Supreme Court.

The firm of J. B. Dutch & Co. has been incorporated at Chicago, to deal in grain, provisions, etc. Capital stock, \$10,000; incorporators, James B. Dutch, M. H. Dutch and N. E. Dutch.

In a quarrel over a wheat deal John Martin kicked J. F. Jones, a prominent wheat buyer of Belview, Minn. The latter has brought suit for \$10,000 damages for permanent injuries received.

The Frederick Grain Company, of Frederick, Kan., shipped in our day a trainload of seventeen cars hard wheat to Kansas City, Mo., where the consignees, Hertz & Honan, received it June 10.

The York Foundry and Engine Company of York, Neb., is furnishing Orcutt Bros. of Doniphan with a 20-horse power engine, 25-horse power boiler and a complete outfit of elevating machinery.

Rowland & Hall, dealers in grain and hay at Crawford, Neb., have formed a partnership with McGrew & Freeman, dealers in merchandise, under the firm name of the Crawford Mercantile Company.

Ably seconded by a marine leg William J. Ryan, boss scooper at the Wilkeson elevator in Buffalo, N. Y., elevated 52,000 bushels of corn in less than five hours, on May 21. This breaks the record.

W. H. Ferguson is building a new elevator at Phillips and has placed his order with the York Foundry and Engine Company of York, Neb., for a complete outfit of machinery, including engine, boiler, scales, etc.

Frank Kaucher, the well known mill and elevator builder of St. Joseph, Mo., is putting in a roller feed mill for the Sidney Elevator Company of Sidney, Ia., for which he has recently built a model elevator under contract.

The incorporators of the Russell-Dolman Grain Company at Toledo, O., are as follows: L. A. Emerson, Clement Carpenter, J. R. Calder, M. P. Braily and F. A. Clary, some of whom have been in the business at Kokomo, Ind.

The Holland Farmers' Elevator Company has been incorporated at Holland, Man., by William Watkins, Thomas Sanderson, James Stewart, William Charters, David E. Mawhuncy, William Thompson and John T. Pennington.

Elevator 'D' at Duluth, Minn., weighed and loaded 85,000 bushels of wheat in 100 minutes on May 10. In ten hours the same elevator loaded into vessels 325,000 bushels wheat. This is said to be the best record made by any elevator.

The immense new pulp and paper plant of the Cliff Paper Company at Niagara Falls is to be supplied with late new designs of the horizontal shaft double discharge James Leffel Wheels, built by James Leffel & Co., Springfield, O. Each of these turbines is to be of 1,100-horse power capacity, and built essentially upon the plan

of their style No. 23, illustrated in the pamphlet of James Leffel & Co. These wheels will connect directly to the pulp grinder shafts at each end of the wheel shafts without belts or gearing.

While in tow of the tug Vassar the canal boat W. L. Sweet, wheat laden from Buffalo, struck a bridge pier at Albany and wet its cargo. The grain was bought by F. W. Lodewick of Albany. Suit has been begun against the owner of the tug.

Two small engines have been placed in the Anchor Line Elevator at Erie, Pa., to furnish additional power for handling the heavy receipts of grain by boat. The portable elevator, which has stood idle ten years, has been repaired and put to work.

John M. Bedford is suing Durfee A. Sherman, Stephen F. Sherman and Henry L. Fish in the Supreme Court at Buffalo, N. Y., for \$235,135 due on promissory notes given in 1888 and 1889 by the defendants, who were in the grain business at the time.

The Farmers' Elevator Company has been incorporated at Syracuse, Neb. Capital stock \$8,000; incorporators, T. D. Sabin, J. W. Rainey, J. W. McCormick, D. A. Shull, L. S. Fallers, W. M. Hair, Z. P. Earl, Gibson DeLong, Levi Ward and R. J. Beers.

All the houses and other property of the defunct Iowa, Minnesota & Dakota Elevator Company will be sold by public auction at Minneapolis, Minn., June 31. The company has elevators in Iowa and South Dakota on the Burlington, Cedar Rapids & Northern Railroad.

The suit of James A. Andrews against William Steele of Ionia, Mich., has been decided in favor of defendant. Andrews brought suit to recover \$5,700 and interest for three years, which he claimed Steele owed him on a wheat deal made on the Chicago Board of Trade.

A contract was closed May 27 at Chicago between the well and favorably known grain elevator architect and contractor, Frank Kaucher of St. Joseph, Mo., and J. W. Sale, of Studabaker, Sale & Co., of Bluffton, Ind., for an elevator, modern in all its details, and specially arranged for handling all kinds of cereals in that locality.

A suit has been instituted by the Wabash Railway Company at Toledo, O., against the Toledo & Wabash Elevator Company to recover possession of the land on which Wabash Elevator No. 5 stands, including the improvements. The elevator company's title originated in a lease given by the St. Louis, Wabash & Pacific Railway Company in 1880.

J. D. Tobey, grain dealer at Chicago, is suing Bryngel Olson for \$50,000 for injuring his credit and business. Olson claims he sold real estate to Tobey for \$4,600, while the latter claims that \$3,600 was the consideration. In the suit growing out of this difference certain charges were made that were detrimental to Tobey's business credit. Hence the damage suit.

J. H. Schofield, a member of the Chicago Board of Trade, has been arrested and charged with embezzling \$925 which had been intrusted to him by Mrs. A. K. Kurtz for investment in certain trades on the Board. He reported to her that the trades had been made and the money lost, but she claims to know they were not and that Schofield pocketed the money.

Messrs. Earnest H. Dodd and Thomas E. Stanley have formed a partnership under the firm name of Dodd & Stanley, to do a grain and flour business at New York City. Both members of the new firm have had many years' experience, Mr. Dodd having been connected with the late firm W. R. Foster & Co., and Mr. Stanley having for several years sold flour on 'Change.

The National Lead & Oil Company is rebuilding the linseed oil mill at Kansas City, Mo., which was burned March 3. The buildings are of brick and are being erected on a new site. When completed next winter the mill will be operated day and night, turning out 100 barrels of oil and 75,000 pounds of oil cake daily. W. N. Marsh is manager and C. W. Marsh assistant manager.

J. A. Campbell & Son of Lincoln, Neb., designers and builders of grain elevators, are about to enlarge and remodel the elevator of N. A. Duff & Co., at Nebraska City, into a transfer and cleaning house, equipped with track scales and best line of machinery for rapid handling and cleaning. Messrs. Campbell have several other jobs of repairing and remodeling now on hand and nearly finished.

The Boston & Maine Railroad Company has made a contract with Simpson & Robinson, the elevator architects and builders, of Minneapolis, for the construction of a 2,000,000-bushel elevator at Charlestown, near Boston, Mass., to be used as a terminal and export grain elevator. Two Corliss Engines of 400-horse power each will be put in. Over three million feet of spruce lumber will be used.

A Montreal firm recently sold some 10 or 11 cars of pressed hay to a certain firm in Toronto. The goods were received and reported as perfectly satisfactory. Another order was sent for some 5 cars at a certain price, and these were ordered forward. About the date they should have arrived in Toronto, the Toronto firm telegraphed to the sellers in Montreal that they had just examined every car and the hay was so thoroughly bad that they must refuse to accept it. But, owing to some delay, the hay had not got away from Belœil at this time, and

yet the Toronto firm had examined it in Toronto. Perhaps the explanation of this peculiar thing may be found in the fact that the price of hay had dropped considerably.—*Trade Bulletin, Montreal.*

One small elevator at New Orleans has in the past season transferred 4,500,000 bushels of grain into ocean steamers. The new elevator of the Texas & Pacific Railroad will be prepared to handle the next crop, making two elevators to receive carload grain. The rumors that the Illinois Central Railroad would build a house seem to have had no foundation for at present there are no indications that the company will do so.

The Litchfield Independent wants to know why the price of wheat at Morris is always two or three cents higher than it is at Litchfield when the Morris elevators are obliged to pay about two cents per bushel more to get the grain hauled to Minneapolis. The editor of the Independent probably does not know that Morris is blessed with an independent wheat buyer who has revolutionized the market at that point.—*Monitor, Benson, Minn.*

Stephen T. Sherman, manager of the Buffalo Elevating Company, the International Elevating Company and the Lake Shore Elevating Company at Buffalo, N. Y., has been adjudged guilty of feloniously converting to his own use 8,250 bushels of grain, by the highest court in New York, the Court of Appeals having on May 24 confirmed the judgment of the lower court. He has been placed in Auburn Prison to pass his five years' sentence. Thus ends an interesting case which has been in the courts for several years.

Fred P. Smith, grain dealer at Kansas City, Mo., is a victim of misplaced confidence. On the night of May 24 Smith went to Chicago, but before going he placed in the hands of his confidential clerk, Clarence Mitchell, two checks signed in blank to be used to meet two bills, the exact amount of which he did not remember. Mitchell seized the opportunity to get rich by making out one of the checks for \$1,006.25, and after cashing it left town. His whereabouts are unknown. Mitchell was 16 years of age, had been employed by Smith two years and lived with his mother.

The Adams Griffin Company has entered the grain and provision business at Montgomery, Ala. This new firm is composed of Charles S. Adams, J. R. McElveen and Mr. Griffin. Mr. Griffin is an experienced grain man and well known to the trade. He was formerly the active member of the firm Meadow & Griffin of Atlanta, that did a large business in grain and provisions. With him from Atlanta is Mr. McElveen, who though a young man, has had some experience as a broker, and is thoroughly well posted. Mr. Adams, the junior member of the firm, is new to the business.

DEAD AND MOLDY WHEAT.

Toledo receipts of wheat are now increasing, and the wheat comes from the farmers' bins, and the grading of it by our rules gives less of No. 2 than the same or similar wheat did last fall. Some of the wheat from the same crop that graded No. 2, does not now grade above No. 3. Why? Because wheat confined in farmers' or other bins, for eight or nine months without being frequently moved, will surely deteriorate. In every crop there is a greater or less element of immature and sickly berries. At harvest these kernels show less damage, and are not discoverable, but in time they become moldy and musty, and give the flour a taint. It is not sufficient that the wheat weighs 60 pounds. Smutty and musty wheat frequently does that, but the prevalence of too many unsound kernels will overcome any excess of weight.—*Toledo Market Report.*

EXPORTS OF WHEAT.

In April we exported 2,532,066 bushels of wheat to the United Kingdom, 3,761,111 to France, 464,152 to Germany, 1,666,648 to other countries in Europe, and 427,319 bushels to Canada, against 1,449,702 bushels to the United Kingdom, 2,370,328 to France, none to Germany, 1,174,308 to other countries in Europe, and 109 bushels to Canada, in April last year.

In the ten months ending with April we exported 56,608,584 bushels of wheat to the United Kingdom, 40,932,694 to France, 5,546,238 to Germany, 30,091,031 to other countries in Europe, 3,701,876 to Canada, 38,191 to the Central American states and British Honduras, 9,098 to the West Indies and Bermuda, 164,618 to Brazil, 65,042 to other countries in South America, 27,367 to Asia and Oceania, and 19,728 bushels to other countries, in comparison with 24,269,807 bushels of wheat exported to the United Kingdom, 9,661,691 to France, 16,940 to Germany, 5,256,344 to other countries in Europe, 1,573,847 to Canada, 42,774 to the Central American states and British Honduras, 160,629 to the West Indies and Bermuda, 571,834 to Brazil, 117,423 to other countries in South America, 12,144 to Asia and Oceania, and 8,675 to other countries in the ten months ending with April, 1891, or a total of 41,692,108 bushels of wheat, valued at \$37,165,971, against a total of 137,204,467 bushels, valued at \$142,651,230, for the period first named.

W. G. Hiatt, of the North Dakota Agricultural College, is conducting experiments at Power in an endeavor to originate a new variety of wheat that will be adapted to the brief growing season of that state.

CROP : CONDITIONS.

NORTHERN TEXAS.—Winter wheat harvest is now under way. On the whole the crop will yield per acre nearly as much as that of 1891.

SOUTHERN KENTUCKY.—A great deal of wet weather, and there is a good deal of complaint of rust. It will be ten days before much wheat will be fit to harvest.

TENNESSEE.—Some little wheat has been cut but it will be a week yet before harvesting will begin in earnest. There seem to be some touches of blade rust, but on the whole the crop promises to turn out fairly well.

SOUTHERN MISSOURI.—There will be little if any wheat fit to cut for ten or twelve days. All wheat is in head but not filling much yet. There is also some report of rust as the weather has been favorable for it.

SOUTH DAKOTA.—Wheat is now from six to ten inches high. Have plenty of rain, and the general prospects for wheat and oats are good, though the crops are fourteen days later than they were last year at this time.

NORTH DAKOTA.—Spring wheat is about four inches high. This is not as high by half as it was last year at this time. No more moisture is needed for two or three weeks in the Dakotas.

CORN.—Prime says every state still reports planting going on. Also replanting. Probably 25 per cent of the crop still remains to go into the ground. Fields are generally, where the crop is up, weedy and in no condition to work.

NEBRASKA, LINCOLN, LANCASTER CO., June 8.—The spring has been very wet and backward in Nebraska up to within a few days. At present writing the prospect is more favorable and everybody more hopeful. J. A. CAMPBELL & SON.

NORTHERN MINNESOTA.—Spring wheat is from four to six inches high. Though the seeding is much later than last season the ample moisture is making the crop grow very rapidly. It will be some considerable time before rains are needed again.

OATS.—In his report of June 11, S. T. K. Prime says: Oats have improved a little, but they are so backward as compared with last year at this time, when they were heading out, that all that can be said about them is they are doing fairly well under the extreme surroundings of the last thirty days.

INDIANA.—Central Indiana reports some few complaints of rust and also of the wheat falling down and lodging. All things considered, the crop is not in as favorable a condition as thirty days ago. In Southern Indiana no wheat will be cut for fourteen days. Some little complaint of rust, but so far confined to the blade of the wheat.

OHIO.—In Northern Ohio recent rains have damaged the wheat to some extent. All things considered, the conditions are not as favorable as twenty days ago. Late wheat headed out and the wet weather is telling on the wheat. In Southern Ohio prospects for a good crop are not as flattering as they were thirty days ago, owing to too much rain.

SOUTHERN MICHIGAN.—During the last fourteen days wheat has made very rank growth and considerable of it has lodged badly. It is not headed yet. A good many wheat growers look for a poor quality for the next crop, and they do not see how three feet of straw before heading will produce a full plump berry with the head filling out two or three weeks later.

KANSAS.—In Southern Kansas the early wheat is just headed out and will not be fit to cut much before the 1st of July. Late wheat not yet headed. Straw is weak. In Northern and Eastern Kansas there was not much change for the better in the last thirty days on wheat. In Central Kansas, while the growth of wheat is rank and no reports of rust, the wheat prospects are good; all wheat is headed, and harvest will commence in about three weeks.

GOVERNMENT CROP REPORT.—The agricultural department reports the crop situation as follows, based on actual returns received: The acreage of winter wheat based on returns to the department of agriculture, is 99.9 per cent, of the actual area of last year. There is a small increase in several of the Southern states and an enlargement in Nebraska of 21 per cent, in winter wheat. The percentage of the spring wheat area is 100.3. The percentage of Iowa is 96; Minnesota, 102; North Dakota, 85; South Dakota, 118; Nebraska, 107. The aggregate is almost exactly 100, or nearly the same as last year. Condition of winter wheat has slightly advanced, the percentage being 88.3. In the Middle states a slight advance is noted, and generally in the Southern states. In the central West a strong advance is seen in Ohio and in Kansas, with increase by two points in Michigan and Indiana, the percentages of principal states being: Ohio, 64; Michigan, 86; Indiana, 87; Illinois, 86; Missouri, 75; Kansas 87. Condition is higher on the Pacific coast—97 in Washington and 98 in Oregon and California. The condition of spring wheat is 92.3—Minnesota, 90; Iowa, 91; Nebraska, 94; South Dakota 95; North Dakota 92. It runs between 90 and 100 in the mountain region, 96 in Washington and 97 in Oregon. The area of rye is 99.2 per cent of last year's breadth, and condition averages 91, an advance of a little more than two points. An

increase of 2.3 per cent, in the breadth of barley is reported. Its condition is 92.1—New York, 93; Ohio, 92; Michigan, 84; Indiana, 88; Illinois, 91; Wisconsin, 95; Minnesota, 92; Iowa 90; Nebraska, 84; California, 92. The acreage of oats is 99.1 per cent, of last year's breadth. General condition, 86.5. The clover area is nearly the same as in June of last year, and condition is 94.9.

ILLINOIS.—In Central Illinois, says crop expert Prime, the wheat prospects have not improved. Heavy storms of rain followed by hot, muggy weather, have developed the black rust. Many fields are also badly damaged by the smut or blackheads. The "Badger" wheat seems to be particularly liable to the black smut. Owing to the incessant rains the wheat has gone to water rather than s'raw. The critical period for the winter wheat crop is just approaching, and there is no telling what a few more days of storm and sunshine may do. In Southern Illinois there has been no wheat cut yet, and the prospects are that it will not be before the 12th or the 15th of the month. There is some little talk of rust on the blades, but so far none on the stalk.



Joseph Morgan, chief grain inspector at Lincoln, Neb., has resigned.

David Dondanville is manager of the new farmers' elevator just completed at Sheridan, Ill.

M. Collins of Peotone, Ill., after having spent twenty years in the grain trade, has retired from the business and started a bank.

John Anderson is now manager of the farmers' elevator at Sheridan, Ill., having bought up a majority of shares of the stock.

G. H. Comstock has resigned his position as associate manager of the Empire Grain & Elevator Company of Binghamton, N. Y.

William S. Pool, foreman of Harris Bros. & Co.'s elevators, has been appointed chief grain inspector at Lincoln, Neb., by Gov. Boyd.

S. M. Ratcliffe, of the firm of S. M. Ratcliffe & Son, grain dealers at Buffalo, N. Y., was married to Miss Ethelyn Cheney on Monday, May 30.

Col C. H. Graves, president of the Lake Superior Elevator Company at Superior, Wis., is a candidate for the Republican nomination for congressman from the Sixth district.

Thomas Barry, wheat buyer for the Pacific Elevator at Gaylord, Minn., was severely bruised upon his right arm and side recently by a farmer's wagon which caught him against the side of the elevator as it was being backed up the driveway.

Captain John O. Foering, chief grain inspector of the Philadelphia Commercial Exchange, sailed on the Red Star Liner Rhynland for Antwerp on June 8. Captain Foering went abroad for his health, which has been slightly impaired by devotion to his official duties during a period of unprecedented activity in the export grain trade at Philadelphia. While in Europe, however, he will combine business with pleasure and take note of the methods in vogue in the grain trade of the chief cities of the United Kingdom and continent that he may visit.

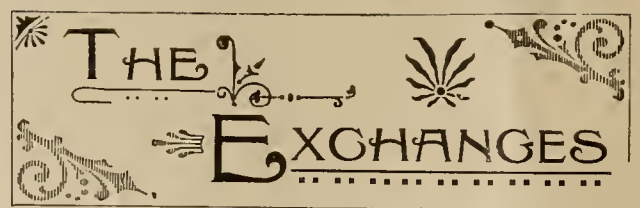
OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

J. S. Kidd, Des Moines, Ia.
James A. Telford, Delphi, Ind.
Frank Kaucher, St. Joseph, Mo.
J. S. Leas of Barnard & Leas Mfg. Co., Moline, Ill.
G. W. Gardiner of J. J. Blackman & Co., New York City.
J. A. Burns, representing Barnard & Leas Mfg. Co., Moline, Ill.
Jas L. Wheeler, Decatur, Ill., representing S. Howes, Silver Creek, N. Y.
B. F. Ryer of The Simpson & Robinson Company, Minneapolis, Minn.
Fred. Cranson, representing Huntley, Cranson & Hammond of Silver Creek, N. Y.

Our exports of hay were 3,254 tons in April, against 1,519 tons in April, 1891; and 29,210 tons, valued at \$485,857 in the ten months ending with April; compared with 24,130 tons, valued at \$402,670 in the corresponding ten months ending with April, 1891.

Our exports of hops in April were 116,253 pounds, valued at \$31,187, against 125,153 pounds, valued at \$38,179 for April, 1891. During the ten months ending with April we exported 12,577,291 pounds, valued at \$2,414,521, against 8,489,564 pounds, valued at \$2,248,100 during the corresponding period of 1890-91.



Tickets of membership in the New York Produce Exchange are selling at \$800.

A special committee of the New York Produce Exchange has taken the question of erecting an additional building under advisement.

A plan has been perfected by which the Chicago Board of Trade will give out quotations through the Western Union Telegraph Company.

Members of the New York Consolidated and Petroleum Exchange propose to add grain to the number of commodities dealt in on the floor.

At a recent meeting it was decided that No. 1 Northern Spring Wheat be not made deliverable on the Baltimore Corn and Flour Exchange on contracts calling for No. 2 Red Winter.

Austin Baldwin and Radcliffe Baldwin, who were recently suspended from the New York Produce Exchange for not paying grain inspection fees, have come to time and turned over the \$174 due.

We are indebted to Geo. F. Stone, secretary of the Chicago Board of Trade, for an advance copy of his annual report for 1891. It contains much valuable statistical matter well arranged for the convenience of the reader.

The directors of the Chicago Board of Trade are considering the feasibility of adopting a system of life insurance in connection with memberships. Is it a precautionary measure in the advent of the passage of the Hatch Anti-Option bill?—*Minneapolis Market Record*.

The directors of the Philadelphia Commercial Exchange have appointed a committee to renew the lease or buy the building occupied by the Exchange. Another committee is in consultation with architects with a view to remodeling the building and making additions to meet the needs of the increasing membership.

A copy of the fourth annual report of the Chamber of Commerce of Rochester, N. Y., has been sent us. It far exceeds the generality of reports sent out by boards of trade in typographical excellence. Besides the mass of information furnished concerning the commerce of the city founded by Col. Rochester, the volume contains a score of elegant half-tones illustrating its public buildings and the scenery in its vicinity.

At the annual election held June 6 the New York Produce Exchange chose Evan Thomas, president; Alfred Romer, vice-president; and E. C. Rice, treasurer. The following were elected managers: Lewis H. Spence, David Dows, E. G. Burgess, Frank Brainard, S. B. Low and Horace Ingersoll. Grain Trade Committee: Frederick V. Dare, chairman, Samuel Taylor, Jr., John Marshall, H. D. McCord and Otto E. Lohrke.

George A. Loring lost his suit against the New York Produce Exchange for \$30,000 damages. He says that in 1884, after he had worked up a good business as regular weigher and measurer of grain for the exchange, it revoked his license and two weeks later appointed him measurer at points where little grain was received and where there were no profits. He claims that his dismissal was malicious and contrary to the rules of the exchange and accordingly asked for damages, which the court denied him.

EXPORTS OF CORN.

Our exports of corn in April were 4,003,157 bushels to the United Kingdom, 1,476,368 to Germany, 2,428,221 to other countries in Europe, 562,059 to Canada, 79,734 to Mexico and 108,378 to Cuba; compared with 772,576 bushels to the United Kingdom, 62,936 to Germany, 327,898 to other countries in Europe, 213,508 to Canada, 11,216 to Mexico and 17,617 to Cuba during April, 1891.

During the ten months ending with April we exported to the United Kingdom 31,964,854 bushels of corn, to Germany 12,272,960, to other countries in Europe 17,236,552, to Canada 3,165,789, to Mexico 438,773, to Cuba 472,053, to the other West Indies and Bermuda 446,965, to the Central American states and British Honduras 103,096, to South America 181,715, and to other countries 18,953, a total of 66,301,710 bushels of corn, valued at \$36,670,991; in comparison with 12,141,083 bushels to the United Kingdom, 3,085,186 to Germany, 5,011,416 to other countries in Europe, 3,815,323 to Canada, 601,637 to Mexico, 336,502 to Cuba, 520,378 to the other West Indies and Bermuda, 87,318 to the Central American states and British Honduras, 134,918 to South America and 35,356 to other countries, a total of 25,769,107 bushels of corn, valued at \$14,152,401, exported in the corresponding ten months of 1890-91.

Broom corn valued at \$6,899 was exported in April, against \$18,945 worth in the month of April preceding, while for the ten months ending with April we exported \$205,956 worth, compared with \$131,656 worth for the corresponding months of 1890-91.

Fires, Casualties, Etc.

An elevator at Webb City, Mo., was burned May 21. Loss \$20,000.

Churchill & Co.'s elevator at Perrysburg, O., was burned on the afternoon of May 17, with 5,000 bushels of wheat. Loss \$25,000; partly insured.

William O'Laughlin fell down a hatchway on the Cyclone Elevator at Buffalo, N. Y., May 20. He was so badly injured that his death ensued shortly after.

Gerberick, Hale & Co.'s grain warehouse and mill at Bellefonte, Pa., was burned May 25, with 40,000 bushels of wheat and 200 barrels of flour. Loss \$50,000.

A bolt of lightning tore a large hole in the side of Vincent Nelson's elevator on the Chicago River June 13, and the rain pouring in damaged the grain considerably.

The Red River Elevator at McIntosh, Minn., was burned May 7, with 4,000 bushels of wheat. The books and the horses were saved. The origin of the fire is not known.

King Maybee's elevator at Sidney, Ont., occupied by F. F. Cole, grain dealer at Toronto, was completely destroyed by fire May 5, with 20,000 bushels of grain. Loss \$40,000; insured.

George Dunn, employed in the Grand Trunk Elevator at Port Huron, Mich., had his right hand badly crushed while operating a steam grain shovel May 20. Four fingers were amputated.

The Farmers' Elevator at St. Louis, Mo., was surrounded by the water overflowing the river banks May 13, but no serious damage was done as the current was not strong at that point.

When the steamer Glengarry was partly burned recently it had on board a cargo of wheat from Port Arthur, Ont. The 20,000 bushels were damaged by water, but as the loss was occasioned by fire the owner of the grain could get no insurance.

An elevator at Mayville, N. D., owned by Mr. Birch, was burned May 20, with over 12,000 bushels of wheat and a car on the side track. Loss on building \$10,000; insurance \$7,500. For his loss on the grain Mr. Birch obtained \$8,500 of the insurance.

John Robertson's elevator at Weldon, Ill., was damaged by fire on the night of June 3. The flames were kindled by an incendiary but were discovered and extinguished before much damage had been done. This was the third attempt of the kind.

The malt house and elevator of Macklem & Slater at Niagara Falls, N. Y., were burned June 7 with 50,000 bushels of malt. The fire broke out in the roof shortly after noon and consumed the buildings despite the efforts of the firemen. Loss on buildings \$40,000; on malt \$60,000; insurance \$66,000.

Until 3 o'clock A. M., May 20, wagons were kept busy hauling grain from the Crescent Elevator at Kansas City, Mo., to high places where the expected flood could not wet it. Later the water began to come in and at noon had completely surrounded the building. The Star Elevator is somewhat higher than the Crescent.

Lightning struck Philip Armour's Elevator "D" at Chicago during a tornado June 13, and tore away a section of the northwest corner twenty-five feet square, which crashed down on top of the boiler room where Charles J. Roberts, the fireman, was at work. His remains were dug out two hours later from under a heavy iron door. He leaves a widow.

A fire started at 11:10 o'clock P. M., May 20, in Penfield, Lyon & Co.'s Washington Mill at Oswego, N. Y., and soon destroyed their elevator, operated in connection. To the north stood the Columbia Elevator and mill, in such close proximity that the building was in flames before anything could be done. The Merchants' Elevator on the north became ignited at the same time that the Corn Exchange Elevator, to the south of the Washington Mill, yielded to the devouring element. So intense was the heat radiated from the burning mills and elevators that the iron sheeting on the south side of the Marine Elevator, standing at the extreme north, became red hot, although streams of water were kept playing on it constantly, and suddenly, with a loud explosion, the entire side of the tall building burst into flame. At this moment the flames fastened on the Continental Elevator, the most southerly of all. At one o'clock A. M., the six burning elevators presented a magnificent spectacle which attracted great crowds of onlookers. That one elevator still remains to Oswego is due entirely to the efforts of the employes of the Northwestern Elevator who unflinchingly stood by with their hose and directed streams of water on the flames that broke out several times. The loss of Penfield, Lyon & Co. is \$100,000, and the insurance \$60,000. The Columbia Elevator, owned by the estate of Jesse Hoyt, was valued at \$30,-

000 and fully insured. The Merchants' Elevator, owned by the estate of W. D. Smith and W. D. Matthews of Toronto, was valued at \$25,000 and not insured. It had a capacity of 250,000 bushels and was to have been transferred to the New York, Ontario & Western Railroad next day. The Corn Exchange Elevator, owned by John Hankinson of New York and valued at \$25,000 was partly insured. The Marine Elevator, owned by Thomson Kingsford, had a capacity of 250,000 bushels and contained 35,000 bushels of corn, a quantity of barley and also 45,000 bushels of malt, owned by Francis Perot's Sons, who had \$45,000 insurance. The corn and barley were insured for \$35,000 and the building \$40,000. The Continental Elevator, owned by the estates of W. P. Irwin and Delce DeWolf, had a capacity of 225,000 bushels, loss and insurance unknown. The loss is not so heavy as it might have been as only the Marine Elevator and the Washington Mill and elevator did any business, the others having been closed since the duty on barley and malt was raised. The 150,000 bushels of grain in the Northwestern Elevator were partly damaged by water. Fully insured.

WINNIPEG NEEDS A PUBLIC ELEVATOR.

Last winter, when the railway blockade was on, and Manitoba was practically shut out from the seaboard, there was much talk, among other things, of building a public grain elevator at Winnipeg, to facilitate the handling of wheat, says the *Commercial* of Winnipeg. The urgent need of a large cleaning and handling elevator here, was then keenly felt. A great deal of the trouble about getting wheat through to the seaboard was due to the lack of proper facilities here. Instead of sending wheat forward in straight export lots shippers were forwarding in straggling car lots, with the result that a great deal of extra work was thrown upon the railways. The result was a general blockade, and a final refusal from the railways to receive Manitoba wheat at all. The need of reform in the mode of handling our grain trade was then shown, and a public handling elevator at Winnipeg, it was evident, was the first thing needed to accomplish the desired end. Grain shipped eastward from all parts of the country, converges at this point. A large handling elevator here would enable shippers to forward their wheat to Winnipeg from their different buying stations, and make it up here into export lots of straight grades, before shipping Eastward. Shippers cannot make up export lots of straight grades at country buying points, but if there were a public handling elevator at Winnipeg, they could ship here from a number of country buying points and thus make up export quantities here of the different grades, as required.

Besides the convenience to shippers which would accrue from a handling and storage elevator here, there are other features of advantage to mention. Many of the country elevators are not supplied with proper cleaning machinery. As it now is, freight is paid on tons of dirt which is sent Eastward with the wheat. There is no business economy in paying freight on dirt. We notice that an elevator is being constructed at Duluth, for the purpose of handling damaged wheat, such as damp grain, etc. Something of this nature established here would enable shippers to realize on grain which otherwise might prove a total loss.

There is not much use of talking about building elevators in the winter time. The summer is the time, and somebody should take hold of the matter and carry it through in time for next crop. As a business enterprise it should be a safe and profitable investment. Grain men who are coming out at the small end of the horn on their season's transactions are just now not in the humor for putting their money in elevators (if they have any surplus money left for investment outside of their pressing personal business needs). There is plenty of capital outside of the grain trade, however, which might be induced to go into the enterprise, and no doubt grain men could show that it would prove a profitable investment. As it is a public elevator which is required, to be used by grain shippers generally, it would be better to have it under the control of men not engaged in doing a regular grain business.

DENVER'S GRAIN TRADE.

Barr & Co., dealers in hay, grain and millstuffs, at Denver, Colo., send us the first annual report of the Merchants' Railway Bureau showing the number full carloads of grain received at Denver by the thirteen firms engaged in the business during 1891. The list enumerates L. Butterfield, J. D. Best & Co., Jackson & Co., F. A. Burnell, Cash Commission Company, South Park Hay & Grain Company, S. W. Chaney, Westman Mercantile Company, J. L. Barr, the Crescent Flour Mills, Schroter & Co., Atkins & Co., and F. C. Ayres.

The total receipts were 685 cars wheat, 1,780 cars oats, 1,030 cars corn, 1,028 cars flour, 3,984 cars hay, 355 cars bran, 214 cars straw, 236 cars barley, 157 cars chop, 23 cars cornmeal, 10 cars rolled oats and 10 cars of broom corn.

Howling Bear, the wild and woolly Indian who proclaims that within two years a great famine will spread over the entire country, that there will be neither corn, wheat, nor grass, and that all animals will die of starvation, would make a first-class Presidential candidate for the calamity howlers.

LATE PATENTS

Issued on May 10, 1892.

GRAIN DRYER OR MOISTENER.—James C. Weller, De fiance, O. (No model.) No. 474,568. Serial No. 383,066. Filed Feb. 27, 1891.

VENTILATING APPARATUS FOR GRAIN BINS.—Frank Morton, St. Louis, Mo. (No model.) No. 474,676. Serial No. 349,159. Filed April 23, 1890.

HAY PRESS.—Thomas J. Finch, Leona, Tex., assignor of one-half to John I. Finch, Union City, Tenn. (No model.) No. 474,498. Serial No. 415,504. Filed Dec. 18, 1891.

CONVEYOR.—Josiah H. L. Tuck, San Francisco, assignor of one-half to E. E. Tucker, Stockton, Cal. (No model.) No. 474,786. Serial No. 406,473. Filed Sept. 22, 1891.

Issued on May 17, 1892.

AUTOMATIC GRAIN WEIGHING SCALE.—James H. Gunder, Homer, Ill. (No model.) No. 474,825. Serial No. 402,346. Filed Aug. 11, 1891.

BALING PRESS.—Charles B. Selover, Owasco, N. Y. (No model.) No. 475,002. Serial No. 407,618. Filed Oct. 3, 1891.

HORSE POWER.—Rufus B. Miller, Spague, Wash. (No model.) No. 474,044. Serial No. 407,884. Filed Oct. 6, 1891.

Issued on May 24, 1892.

AUTOMATIC WEIGHING SCALE.—Nathaniel Lomhard, Boston, Mass. (No model.) No. 475,405. Serial No. 415,503. Filed Dec. 18, 1891.

GRAIN CAR DOOR.—William S. Schroeder, Chicago, Ill. (No model.) No. 475,422. Serial No. 398,994. Filed July 10, 1891.

GRAIN DOOR FOR CARS.—Robert O. Hixson, Russellville, Ind. (No model.) No. 475,449. Serial No. 392,183. Filed May 9, 1891.

SYSTEM OF PNEUMATIC MALTING.—Franklin B. Giesler, Milwaukee, Wis., assignor to the Galland-Henning Pneumatic Drum Manufacturing Company, same place (No model.) No. 475,555. Serial No. 384,246. Filed March 9, 1891.

APPARATUS FOR DRYING SPENT GRAIN AND THE LIKE.—Friedrich E. Otto, Dortmund, Germany. (No model.) No. 475,602. Serial No. 403,745. Filed Aug. 25, 1891.

APPARATUS FOR ELEVATING AND MOVING GRAIN.—Daniel B. Taylor, St. Louis, Mo. (No model.) No. 475,635. Serial No. 414,017. Filed Dec. 4, 1891.

Issued on May 31, 1892.

LEVER FOR STARTING CARS.—Arthur Hubbard, Buffalo, N. Y. (No model.) No. 475,770. Serial No. 407,154. Filed Sept. 29, 1891.

GRAIN SEPARATOR.—James M. King, Rochester, Minn. (No model.) No. 475,779. Serial No. 410,475. Filed Oct. 31, 1891.

GRAIN ADJUSTER.—Theodore H. Headershot, Griswold, Ia. (No model.) No. 475,861. Serial No. 400,415. Filed July 23, 1891.

CAR MOVER.—George W. M. Simms, De Soto, Mo. (No model.) No. 475,902. Serial No. 418,946. Filed Jan. 22, 1892.

Issued on June 7, 1892.

GRAIN WEIGHING MACHINE.—John Sprinkle, Walton, Ind. (No model.) No. 476,427. Serial No. 407,121. Filed Sept. 27, 1891.

ENDLESS CHAIN ELEVATOR.—Benjamin Arnold, East Greenwich, R. I. (No model.) No. 476,507. Serial No. 427,801. Filed April 5, 1891.

GRAIN METER.—Addison N. Calkins, Quincy, Ill. (No model.) No. 476,608. Serial No. 419,442. Filed Jan. 21, 1892.

TRADEMARKS.

[Issued since our last publication.]

WHEAT, CORN, BARLEY AND RYE.—F. H. Peavey & Co., Minneapolis, Minn. Application filed April 5, 1882. No. 21,191. Used since March 1, 1890. The letters "Pv."

Merchandise valued at \$344,723,243 was exported in the first four months of the year, against \$303,727,610 worth in the first four months of 1891, and \$281,838,211 worth in the first four months of 1890. In the twelve months ending with April the exports were valued at \$1,011,505,279, against \$879,391,947 and \$847,694,256 in the corresponding periods ending in 1891 and '90 respectively.

WATERWAYS

About 30,000 bushels of the grain cargo of the wrecked steamer John B. Lyon was saved.

The Canadian steamer Rosedale went aground at Sault Ste. Marie May 31 and wet its cargo of grain.

The boat line now plying between St. Louis and Kansas City will extend its operations to St. Joseph and Atchison, Kan.

The schooner G. W. Davis was short eighty eight bushels in its wheat cargo from Detroit, recently unloaded at Buffalo.

Strange to say the schooner Hoboken overran twenty bushels on a wheat cargo from Toledo recently unloaded at Buffalo.

Erie, Pa., received from the opening of the season of navigation until May 25 4,990,479 bushels grain, against 846,811 bushels last year.

The whaleback steamer Pathfinder, now being built at West Superior, will carry 116,000 bushels of wheat on a draft of only fifteen feet.

Nine vessels were in the harbor at Erie, Pa., May 18, waiting to unload at the Anchor Line Elevators. This fleet contained 642,000 bushels.

A new line of steamers has been placed in operation between Gladstone and Traverse City, Mich., to handle the business of the "Soo" Railroad.

The steamer Wergeland which recently arrived at Chicago from Bergen, Norway, took as part of its return cargo 8,000 bushels of No. 3 red wheat.

A Nicaragua Canal Convention met at St. Louis June 3 and resolved that the Congress of the United States should give financial assistance to the work.

Owing to the corn corner at Chicago the steamer Rochester at Buffalo loaded 27,000 bushels May 23 to be taken to the former place and sold at a high price.

During the winter rail rates on wheat from Buffalo to New York were 74-5 cents per bushel, but now they have dropped to 2¼ cents because the canal is open.

Boats carrying 2,800 tons with the present depth of water could carry 4,800 tons with but little additional expense if the channels connecting the lakes were deepened to twenty feet.

The dimensions of the Canadian canals between the lakes and the ocean are such that no vessel longer than 200 feet can get through, nor can any vessel drawing more than nine feet pass over the mitre sills.

The three new steamers being built for the Erie & Western Transportation Company have some hearing on the policy of the Pennsylvania Railroad in developing the grain trade between Erie and Philadelphia.

The wet cargo of the steamer John B. Lyon, which recently went ashore on Lake Huron, was sold to Buffalo dealers for five cents a bushel. A large portion of its load of 100,000 bushels was jettisoned to release the vessel.

Modern steamers on the lakes make the run between Chicago and Buffalo at the rate of sixteen miles per hour, while the freight train makes nine miles per hour; and the steamer carries the freight at one-twenty-sixth the cost of rail transportation.

The barge Princess of the Kingston & Montreal Forwarding Company's line, sprung a leak recently while going down the Lachine Canal. Quick work saved the cargo from a wetting, except 2,700 bushels, which was sold by auction for 27 cents a bushel.

To increase the usefulness of the Welland and St. Lawrence Canals it is proposed to keep them closed only from 6 o'clock A. M. Sundays to 9 P. M., instead of keeping them closed from midnight to midnight, thus delaying vessels twenty-four hours, in some cases.

The Hurontario Ship Railway Company has been organized to build the proposed ship railway to carry vessels between Lakes Huron and Ontario. The roadbed will be fifty feet wide and will have six parallel steel tracks of extra heavy rails. The estimated cost is \$15,500,000. It is designed to carry vessels up to 5,000 tons' burden.

River men know that the head of navigation on the Mississippi River is St. Paul, and that no boats ever go further north to Minneapolis. But these facts to the contrary, notwithstanding Hon. W. D. Washburn, senator from Minnesota, secured an amendment to the river and harbor bill declaring that Minneapolis is the head of steamboat navigation on the Mississippi.

The Canadian steamer Clinton, with a load of 18,000 bushels of wheat, consigned from Superior for export in care of the Montreal Transportation Company at Kingston, struck Topsail Island in St. Mary's River while en route and was run on the beach. After jettisoning 11,000 bushels of the wet cargo it was found it would float, and Mr. Armour of Chicago having purchased the 7,000 bushels remaining, special permission was given the captain by the Secretary of the Treasury to discharge the

cargo at Chicago and make repairs. On June 3 the boat arrived and the wet wheat was unloaded at Armour's elevators and run through the new grain dryers to determine their value as savers of wet grain.

Governor Flower of New York has vetoed the bill appropriating \$540,000 for canal improvements. This action is bad for the Erie Canal. If the state does not intend to care for the canal it should be given over to the National Government.

Out of forty-six grain laden vessels on the way to Europe May 11 from San Francisco, only one bore the American flag. At that time forty-nine vessels were afloat with grain bound from Oregon to Europe and only one carried the American flag; while of the twenty ships wheat laden from Washington not one was an American. A sad commentary on the American merchant marine.

The report of the House Committee on Railways and Canals on the bill appropriating \$100,000 for ascertaining the feasibility and probable cost of constructing a ship canal from the Great Lakes to the navigable waters of the Hudson River, advocates a deep water channel upon the territory of the United States. The committee sees objections to a long canal from Buffalo to the Hudson, preferring a route that will include Lake Ontario.

The Great Lakes and the Erie Canal, by the simple fact of offering cheap transportation, have become the leading factors in the commerce of the United States to-day. The cheap water transportation which they offer has enormously enriched the country in which they are located, developing its resources and producing the greatest and most promising cities in the United States. Buffalo and New York owe much to the cheap transportation of the lakes to the Erie Canal.—*Omaha World-Herald*.

Four careful surveys were made before the present route was chosen for the Nicaragua Canal. Subsequent events and experience show that no mistake was made in locating the canal where nature had parted the mountains that everywhere else block the way. The canal locks are to be 650 feet long, 75 feet wide and 30 feet deep. Three rapids in the San Juan River are being removed; a dam is being built across it at one point, and at its mouth a harbor has been dredged. A large rock cut two and three-quarter miles long must be made. The course of the canal lies across Lake Nicaragua for 56 miles. This lake is the highest level in the whole canal and yet is only 110 feet above ocean level.

At the meeting of the Mississippi Valley Deep Water Convention at Memphis May 13 there was organized the Mississippi River Improvement Association as a permanent body to strive for the improvement of the river. It was resolved that it is the duty of the United States to provide money for river improvement, that both Houses of Congress be commended for encouraging the system of continuous appropriations for the improvement of the Mississippi River, and "that it affords great gratification to the people of the Mississippi Valley to see the growing disposition throughout the Union to recognize the simple justice of aid being rendered by the government in the construction and maintenance of levees, thus protecting and relieving the people of the lower valley from the disaster of the overflow." This last resolution, in other words, means that the delegates to the convention desire the National Government to spend public money to protect local interests. Ever since the first river and harbor bill was passed the United States Government has carefully avoided committing itself to the policy of building levees, recognizing that this work is a prerogative of the individual states.

THE BUFFALO ELEVATOR OCTOPUS SHOWING ITS TEETH.

The harbor master to-day moved the floating elevator Cyclone from the river about Michigan street bridge, where it had been an obstruction to navigation. The owners of the elevator claim to have leased the dock where it was moored, and had built a conveyor on the dock for loading boats. The Cyclone was towed into the Ohio basin. This elevator has been transferring grain for ¾ cent, as compared with ⅓ cent charged by the elevator association.

Comment—Reading between the lines and under the whole business the Buffalo Elevator Company's fine hand is plainly visible. The West is becoming tired of this monopoly and toll-gate. To-day it is levying ⅓ cent per bushel tax for transferring grain from vessels to canal boats, and canal boats are ready to carry the grain from Buffalo to New York at 2 cents per bushel. Every dealer and every farmer in the West is swindled by this Buffalo monopoly. Swindled because it prevents competition. It prevents others from transacting this business for less money, who are anxious to do it. It is a monopoly which favors the railways, and is aiding to destroy the Erie Canal as a competitor. It is time for the West to commence a fight for her own interest in this matter.—*Toledo Market Report*.

"Western farmers who expect to raise a crop of corn this year," observed the Bangor News, "will have to use diving bells in planting it." This has been done already, dear friend, and enterprising dealers in farm machinery have laid in a stock of the Floating Dutchman Corn Cultivator and also oyster tongs for gathering the crop later in the season.

COUNTRY ELEVATOR MEN WHO ADVERTISE.

Elevator men who advertise in the local weeklies are not very numerous, but the number is constantly growing larger. The local dailies have been tried by some grain buyers, but they were not long in learning that the daily was not the medium that would give the best results. Farmers seldom take dailies because they cannot spare the time to go to town to get them. The local weekly is pre-eminently a farmer's paper, and few of them fail to appreciate this fact and take the weekly. For this reason the weekly is the best medium through which to inform the grain producer that you are and always will be prepared to pay him the highest market price for his grain.

Many compile and publish a report of the highest and lowest prices paid for the different grains during the week. This is an excellent practice, but could be greatly improved upon by publishing different prices for dirty and clean grain. This would be a constant reminder to the farmers that the buyer knew the difference between good clean grain and chaff, dirt and old iron. It has not, however, been the custom for buyers to solicit business in connection with their market reports, although this would surely bring good results. A full market report with a resume of crop conditions and market prospects together with a few lines setting forth the superior facilities for receiving and handling grain at any elevator is the best advertisement any firm can have. The first all grain growers would read with deep interest and the last they would read without objection.

The poorest newspaper advertising indulged in by country elevator men is the plain stereotyped card:

WHEAT & CORN,

NOWHERE,

Cash paid for grain.

KAN.

It is better than no advertisement, for it conveys some information, and by referring to it grain growers can learn that at least one firm is buying grain at Nowhere. Only when they desire this information will the same card which is published week after week be looked at. The farmer, like other persons, reads the newspaper for news, and when he finds that an advertiser has something new to say every week he will make it a point to look up that advertiser's advertisement and read it. Farmers seldom read the same article twice, likewise advertisements. A short paragraph, if changed weekly, well worded and placed in the reading matter columns will give much better results than a card.

Display advertisements are good but not the best form of advertising for the elevator man who wishes to reach the farmers. A western buyer who is a persistent advertiser has published the following for some time:

BRING YOUR GRAIN

—TO THE—

WILTON ELEVATOR,

And receive the highest market price possible to pay.

We purchase all kinds of grain at all seasons of the year.

As the elevator is supplied with a patent "Dump" all shoveling in unloading your wagons is done away with and you can unload in one minute.

The advertisement is an excellent one in that it gives the grain grower three very good reasons why he should take his grain to that elevator, namely, highest price, always open and no shoveling. If the reading matter was changed oftener the same space would give much better results. Another firm which makes use of the display advertisement announces that, "Our scales are inspected every week, and we always give correct weights. All grain is received by patent dumps. No shoveling. No waiting." Whether intended or not the first sentence throws suspicion about the competitors of the advertiser. Under ordinary circumstances it is not advisable to follow such methods and it is doubtful if it ever gives good results. Advertising a competitor either directly or by implication is not what you want to pay for.

Any advertisement, it matters not how small or how it is placed, will do the buyer some good. Even if it brings him no new business it will tighten his hold on his regular customers and give him better standing with all. They will learn that he is there to stay and carry out what he agrees to do. It gives him a standing with the grain producers that the irregular buyer cannot secure.

The recent flood caused a loss of \$1,200,000 worth of wheat in Tennessee.

Toledo wheat now commands a premium in New York of 6 to 7 cents per bushel, for export to the European Continent, the identity of the wheat being guaranteed. This result is fairly attributable to two causes, the first being the best and most uniform inspection system in this country, and second, the constantly reiterated statement of this fact in this paper, and correspondence with England and Germany respecting the standard of our wheat as compared with seaboard grades.—*Toledo Market Report*.

ITEMS FROM ABROAD

A shipload of corn, the first of the crop of the Argentine Republic, arrived recently at Antwerp in very good condition.

Portugal in January exported 54,000 bushels of rye and 290 sacks flour, and imported no rye and 1,900 240-pound sacks flour.

The Russian ukase given out May 12, allows the export of corn from all parts and the export of oats in store at Archangel, Libau, Reval and Riga.

Australia and New Zealand shipped in the twenty weeks preceding May 21, 3,688,000 bushels wheat and flour as wheat, against 8,520,000 shipped in the same weeks last year.

Norway imported in the first quarter of the year 646,000 bushels rye and 633,000 bushels barley, against 1,483,000 bushels rye and 383,000 bushels barley in the first quarter of last year.

A commission appointed by the German Emperor to investigate trading in futures has reported that the system is a beneficial and necessary one and that any legislation interfering with it would be a mistake.

Germany in March imported 4,448,000 bushels wheat and 3,240,000 bushels rye, against 976,000 bushels wheat and 1,760,000 bushels rye in March, 1891, and 1,012,000 bushels wheat and 1,888,000 bushels rye in March, 1890.

The drought in Mexico during the past year has killed vegetable life in all the northern, eastern and central tiers of states except the southern half of Tamaulipas. About 3,000,000 persons are directly affected by the drought.

Belgium imported in March 9,776,000 bushels wheat, 651,000 bushels rye, 213,000 bushels barley and 169,000 240 pound sacks flour; and exported 2,728,000 bushels wheat, 797,000 bushels rye, 425,000 bushels barley and 207,000 sacks flour, in the same month.

Belgium imported during the first four months of the year 12,328,000 bushels wheat, 308,000 bushels rye, 2,375,000 bushels barley and 233,000 240-pound sacks flour; and exported 4,096,000 bushels wheat, 8,340,000 bushels rye, 592,000 bushels barley and 275,000 sacks flour.

The Argentine Republic in the nineteen weeks ending May 14 exported to the United Kingdom and for orders 6,150,000 bushels of wheat, against 4,500,000 in the same weeks last year. The Continent received from the Argentine Republic 1,080,000 bushels in the first nineteen weeks of the year.

The United Kingdom imported during the first four months of the year 504,123 quarters of flaxseed, 79,016 quarters of rape-seed and 1,000,000 quarters of cottonseed; against 516,449 quarters flaxseed, 64,891 quarters rape seed and 800,000 quarters cottonseed during the first four months of last year.

Germany imported in the first quarter of the year 5,847,852 bushels American corn, against 1,111,424 bushels in the first quarter of 1891, an increase of over 400 per cent. The Secretary of the Department of Agriculture regards these figures as showing the value of the efforts made to introduce our corn into Germany.

Austria-Hungary exported in March 152,000 bushels wheat, 566,000 bushels corn, 640,000 bushels oats, 154,000 bushels rye, 1,433,000 bushels barley and 26,000 240-pound sacks flour; and imported in that month 40,000 bushels wheat, 189,000 bushels corn, 123,000 bushels oats, no rye, 25,000 bushels barley and no flour.

Russia will permit the export of wheat if the reports received from the governors of the various provinces show that there is sufficient grain to feed the people until the next harvest; and they will no doubt make favorable reports, as large supplies are known to exist. A ukase permitting exports is confidently awaited.

Holland, in April, imported 1,088,000 bushels wheat, 317,000 bushels rye, 865,700 bushels corn, 66,500 bushels oats, 158,000 bushels barley and 46,000 240-pound sacks of wheat flour; and exported 816,000 bushels wheat, 351,000 bushels rye, 377,000 bushels corn, 275,500 bushels oats, 192,000 bushels barley and 14,000 sacks wheat flour.

India in 1891 harvested 6,759,000 tons wheat and exported 1,502,000 tons, in 1890 harvested 6,299,400 tons and exported 716,592, in 1889 harvested 6,510,979 and exported 690,200, in 1888 harvested 7,108,225 and exported 881,119, in 1887 harvested 6,088,526 and exported 676,859, and in 1886 harvested 6,871,364 tons and exported 1,112,842 tons.

France in April imported 7,736,000 bushels wheat, 580,000 bushels barley, 490,000 bushels corn, 256,000 bushels oats and 19,000 240-pound sacks flour; against 5,832,000 bushels wheat, 900,000 bushels barley, 180,000 bushels corn, 988,000 bushels oats and 30,000 sacks of flour in April last year. The exports in April were 224,000 bushels wheat, 394,000 bushels rye, 817,000 bushels barley, 23,700 bushels corn, 522,000 bushels oats and 52,

000 sacks flour; against 328,000 bushels wheat, 17,000 bushels rye, 158,000 bushels barley, 77,000 bushels corn, 475,000 bushels oats and 64,000 sacks flour, in April, 1891.

The agitation for uniform weights of grain continues in England, and it is quite possible that the quarter of eight bushels, the quarter of 28 pounds and other relics of the middle ages will be discarded.

"Distance is the curse of Russia," said the Emperor Nicholas; and his words have come true during the famine; for although there has been enough grain in different parts of the country to feed the people, yet the lack of railways to carry it long distances has prevented its distribution. While the province of Semiretchinsk has enough grain left from the last harvest to last ten years, the people along the Volga River are starving.

OBITUARY

Captain Peter Bowers owner of the elevator at Spring Valley, Ill., died at his home in Peru, Ill., May 10.

C. Jamison, who recently went from Canada to engage in the grain business at Chicago, died at the Victoria Hotel May 24, of pneumonia.

Joel Wheeler, an old grain dealer of Buffalo, died May 7, aged 78 years. Joel Wheeler & Co. own the Ontario Elevator, built by them two years ago.

Robert H. Strong, an old grain dealer of Milwaukee, and member of the firm Kellogg & Strong, died at Waukesha May 6. Messrs. Kellogg & Strong were very prominent in the grain trade on the upper Mississippi River thirty years ago.

John N. Booth of John N. Booth & Co., grain commission dealers of St. Louis, died May 10. For a long time he was a prominent figure in the trade, and at the time of his death was president of the St. Louis Grain Receivers' Association and a member of the St. Louis Merchants' Exchange, having been actively connected with the latter body ever since its organization. He was a public-spirited citizen, ever striving for the welfare of the people. His business methods were honorable, his moral rectitude being recognized by all who had dealings with him. In private life also was he diligent in the practice of the highest virtues. His untimely end in the prime of life is deeply deplored by his numerous friends who extend their heartfelt sympathy to his bereaved family and to his sorrowing brother.

RECEIPTS OF GRAIN AT NEW YORK.

New York received last year 61,006,851 bushels of wheat, 24,342,094 of corn, 27,737,750 of oats, 4,937,540 of barley, 5,591,105 of rye, 930,590 of peas and 3,880,166 of malt, total 128,426,096 bushels of grain; compared with 15,794,857 bushels of wheat, 34,261,466 of corn, 33,744,000 of oats, 4,295,640 of barley, 1,228,393 of rye, 619,014 of peas and 5,036,538 of malt, total 94,969,008 bushels for 1890, and 15,973,258 bushels wheat, 35,547,467 of corn, 23,261,150 of oats, 4,253,290 of barley, 1,462,070 of rye, 425,010 of peas and 4,691,288 of malt, total 85,613,533 bushels grain received in 1889.

FARMERS' ELEVATORS.

The erection of a number of farmers' elevators in Manitoba last summer, has been considerable of a benefit to the grain men, and, of course, a corresponding loss to the farmers. These farmers' elevators are all full of wheat, which was put in by the farmers to hold for higher prices. It is needless to say that these higher prices never came, and the immediate future does not give much hope for an advance. Instead of obtaining higher prices for the held wheat, it could not now be sold for anything like the prices offered by grain men last fall and winter. The farmers who have held their wheat, not only lose the difference in the price between present values and prices last fall, but they also have interest, insurance and storage expenses to make up. Many of them have borrowed money on their stored wheat, at a round rate of interest.

How the grain men benefit from the farmers' elevators is explained by the fact that had it not been for the erection of these elevators the wheat now held in them would in all probability have been held by the grain men. In the absence of these elevators, the farmers would have sold their wheat during the winter to the grain buyers. The way prices have gone this season, those who have the least wheat are best off, and the more wheat that has been carried by farmers, the less is left for the dealers. Every bushel of wheat now held in the farmers' elevators, which would otherwise have been held by dealers, represents a saving to the dealer, and on the other hand a loss to the farmer. The grain men who are now carrying more wheat than they wish they had, are endeavoring to extract sunbeams from cucumbers by congratulating themselves that so much wheat is held in farmers' elevators all over the country. If there had been a few score more of these institutions, they would have been even more bappy, as things have resulted for them this year.—*Winnipeg Commercial*.

PRESS COMMENT.

NEW YORK STATE WATERWAYS.

Governor Flower has given an illustration of hostility to the canals, which is very much to be regretted. While Canada, with less population and less aggregate wealth than New York state, is spending many millions of dollars on her canals to give them fourteen feet uniform depth of water Governor Flower vetoes a bill expending \$560,000 to give our New York canals half the depth and capacity of locks and insure the safety of feeders to the canals of the Empire state, which, more than any other one thing, have made the state what it is.—*American Grocer, New York*.

BUSINESS FRETTED BY DEMAGOGY.

The curse of commerce, as it is the curse of politics, is the spirit of the demagogue. The great business interests of the country, enwrapping the welfare of the whole people, are dependent for their permanency and prosperity upon wise, cool and conservative legislation. It not only involves the paralysis of trade, but it is a menace against the life of representative government, when tuppenny statesmen are suffered to run riot with their blatant prejudices, through economic issues, and to sacrifice sound material policies to their selfish and unscrupulous scrambles after office.—*Dixie, Atlanta, Ga.*

THE AGE OF SPECULATION.

In response to the requirements of the present epoch, the facilities for speculation are rapidly widening, despite the threadbare harpings of trade moralists upon the gambling character of option transactions; and, as long as the overcrowding in the ranks of legitimate traders continues, will speculative ventures increase and flourish. The fact is that speculation has in a great measure been forced upon a large proportion of the mercantile community, owing to the glut of new traders springing up, overcompeting for a bare existence, and cutting down profits to a point that has in a number of instances proven disastrous to the older firms, while others, finding their business curtailed and unprofitable, have been induced to seek speculative channels for the employment of their remaining capital.—*Trade Bulletin, Montreal*.

RUSSIA PREPARING TO PUSH ITS WHEAT TRADE.

Russia is making systematic efforts to push, not only her wheat grain, but her wheat flour also, into Western Europe, and into Great Britain particularly, intensifying the competition that already exists between Russia and the United States in the grain markets of England. The point of interest to Americans is the fact that Russia has built great grain elevators on the United States system and will build more, and that she will put into effect measures that will result in enabling some of our best European customers to buy Russian wheat of high grades in a condition of cleanliness almost equal to that prevailing in the United States wheats. This point is well worth attention in the United States, as, if carried out on the lines indicated, Russian wheat will be more attractive than ever in Western Europe.—*Milling World*.

SEED EXPORTS AND IMPORTS.

The exports of seeds in April were: Flaxseed 15,689 bushels, timothy 1,865,298 pounds, clover 175,292 pounds, and cotton 436,394 pounds; against 31,305 bushels, 1,095,645 pounds, 434,013 pounds, and 469,680 pounds respectively in the same month last year. In the month we imported 60,050 bushels of flaxseed, none of which was exported.

In the ten months ending with April we exported 3,570,616 bushels flaxseed, worth \$3,865,971; 9,467,006 pounds timothy, worth \$355,606; 19,499,178 pounds clover, worth \$1,629,211, and 11,241,583 pounds cotton, worth \$81,535; against 107,039 bushels flaxseed, worth \$141,161; 8,264,684 pounds timothy, worth \$352,940; 20,049,553 pounds clover, worth \$1,521,213, and 9,860,404 pounds cotton seed, worth \$82,048, exported in the corresponding ten months ending with April, 1891.

We imported in the ten months ending with April 251,116 bushels of flaxseed, worth \$278,407; against 1,455,528 bushels, worth \$1,588,409, in the corresponding period of 1890-91, and in the latter period we exported of imported flaxseed one solitary bushel, valued at \$2.

New Orleans exported in May, as reported by the grain inspectors of the Board of Trade, 636,408 bushels corn, 814,825 bushels wheat and 10,500 bushels rye, against 134,171 bushels corn, 461,747 bushels wheat and no rye in May last year. Twelve shipments of corn were made and fifteen of wheat.

Mercandise valued at \$290,967,996 was imported in the first four months of the year, against \$287,190,174 worth and \$265,554,570 worth in the first four months of 1891 and 1890 respectively. The imports during the twelve months ending in April were valued at \$832,098,765, against \$845,033,230 and \$773,681,490 during the corresponding periods ending in 1891 and '90 respectively.

BILLS OF LADING.

Bills of lading possess characteristics similar in many respects to the pure negotiable instruments which pass from hand to hand like money; the term negotiable, when applied to bills of lading, is in many respects a misnomer; the more accurate term would be quasi negotiable.

Some of the states have attempted, by legislation, to place bills of lading upon the same footing as bills of exchange and promissory notes, and to endow them with every attribute of pure negotiable instruments. In the construction of such statutes the courts have given them a rather limited and restricted effect; they are held as simply intended to affect the mode of transferring or assigning bills of lading and making such transfer and delivery for certain purposes, equivalent to an actual transfer and delivery of the property itself. (*Bank of Commerce vs. Railroad Company*, 44 Minn., 224.)

Thus, the United States Supreme Court, in construing a statute of the state of Missouri making bills of lading negotiable as bills of exchange and promissory notes, says: "It does not necessarily follow that because a statute has made bills of lading negotiable by indorsement and delivery, all of the consequences of an indorsement and delivery of bills and notes before maturity ensue, or are intended to result from such negotiation." (*Shaw vs. Railroad Company*, 101 U. S., 557.)

In the state of Maryland, however, under a statute making bills of lading negotiable in all respects as bills of exchange and promissory notes, it is held that bills of lading possess all the attributes and characteristics of bills and notes, for all purposes. (*Tiedman vs. Know*, 53 Md., 612.)

The principle that "a title, like a stream cannot rise higher than its source," applies to bills of lading, and the holder thereof cannot communicate a better title than he himself has, unless some principle of equitable estoppel intervenes against the person claiming under what would otherwise be the better title. (*Bank of Commerce vs. Railroad Company*, *supra*.)

A bill of lading is not a conclusive evidence of title, and if the goods covered by it are not actually received by the carrier, no title passes by delivery of the bill, even to one who, in good faith and without notice, has made advances of money or property upon the bill. (*Bank of Commerce vs. Railroad Company*, *supra*.)

On the same principle, the holder of a lost or stolen bill of lading can pass no title to the property, even though it be indorsed and delivered to an innocent purchaser for value and without notice. (*Shaw vs. Railroad*, *supra*.) A directly contrary rule prevails in the case of a lost or stolen bill or note.

The carrier is not estopped, by the receipt contained in the bill of lading, from denying that the goods were actually received for transportation. (*Robinson vs. Memphis Railroad Company*, 9 Fed. Rep., 129.)

Keeping in view the limitations noted above, a bill of lading may be said to be assignable in the same manner as a bill of exchange or promissory note, and its delivery to a bona fide purchaser for value, carries title to the property covered by the bill, which is good against the world; all equities and liens being effectually cut out by such delivery. (*Lieckbarrow vs. Mason*, 1 Smith's L. C., 1159.)

A bill of lading is both a receipt and a contract; as a receipt, it is the paper representative of the goods covered by it, being a muniment of title and regarded as "so much grain, provisions or other articles of merchandise."

The consignee named in the bill of lading is prima facie the owner of the property, unless the bill be made out "shipper's order," in which case the consignor or his indorsee is regarded as the presumptive owner. It seems to be the accepted doctrine in this country that mere delivery of a bill of lading, without a formal indorsement, carries the title to the goods, even where the bill contains no provision for delivery to bearer. (*Bank vs. Homeyer*, 45 Mo., 145. *Bank vs. Jones*, 4 Comst., 497.)

Any person making bona fide advances of money or property upon a bill of lading, or who discounts commercial paper attached to a bill of lading, in good faith and without notice, acquires a good and irrevocable title to the property.

No distinction is recognized between the title of one who has received the bill of lading as collateral security upon a bona fide loan, and the title of an actual purchaser of the bill.

One taking a bill of lading as collateral security for a pre-existing debt is not, however, a bona fide purchaser for value as against the lien of an unpaid vendor for the purchase price although a different rule obtains where the bill of lading is taken, not as collateral security, but in absolute extinguishment of a pre-existing debt. (*Nopa Valley Wine Co. vs. Rhinehart*, 42 Mo. app., 171.)

If a carrier delivers the goods to a vendee in contradiction of the express terms contained in the bill, e. g., where the bill is attached to a draft and provides for the delivery of the goods only upon the payment of the draft, no title passes to the person receiving goods unless the draft is actually paid, and he can pass no title even to an innocent purchaser. (*Heiskell vs. Farmers' Bank*, 89 Pa. st., 155.)

A carrier is bound by every statement contained in a bill of lading, when the goods have been actually received. (*Pollard vs. Vinton*, 105 U. S., 7.)

The carrier cannot validly contract against the consequences of negligence in its carriage, and such exceptions or conditions contained in a bill of lading are held to be void. The carrier should strictly comply with all instructions contained in the bill of lading and if the goods

are deliverable to order, the carrier can only deliver them on the presentation of such order.

As a contract with the carrier, a bill of lading was not at common law assignable. This is generally changed by statute in this country and the transferee of the bill may sue the carrier in his own name for a failure to deliver the goods according to the terms of the contract.

The legal effect of a bill of lading as a receipt and as a contract, when used as evidence is different in this, that as a contract with the carrier it cannot be varied or contradicted by parol evidence except in cases of fraud, but as a receipt, parol evidence is admissible to contradict or explain it. (*Fitzhugh vs. Wineau*, 9 N. Y., 559. *Wolfe vs. Meyer*, 3 Sandf., 7.)

Where the quantity or amount of goods is guaranteed by the carrier, the carrier is bound by the quantity or amount as it appears in the bill of lading. (*Bissell vs. Campbell*, 54 N. Y., 353.)

The carrier is liable if it delivers the goods without the production of the bill of lading to a person not authorized by the owner to receive them. (*Dwyer vs. Railroad Company*, 69 Tex., 709.)

Bills of lading are usually issued in sets of two or three. If these be indorsed and delivered to different persons, the rule is that the holder of the bill first indorsed, all equities being equal, acquires title to the goods. (*Bank vs. Ege*, 109 N. Y., 120.)

Stipulations in a bill of lading restricting the liability of the carrier are to be interpreted by the law of the place where they are issued and received, and not by that of the place of performance, according to the decision of the Supreme Court of Pennsylvania in the case of *Fairchild vs. Philadelphia, Wilmington & Baltimore Railroad Company*.

The Kentucky Court of Appeals held, in the recent case of *Louisville & Nashville Railroad Company vs. Owen*, that a common carrier cannot limit his liability for negligence by stipulating, in a contract to carry property, that in the event of loss or damage his liability is not to exceed a certain sum.

The fact that a smaller number of bags are delivered from a ship than were received by it, raises only a presumption that the cargo was short, and when it is conclusively shown that a large portion of the cargo was rebagged in larger bags, and that by weight the cargo was within one per cent. of the amount stated in the bill of lading, a substantial delivery has been proved. (*Kernish vs. Havemeyers & Elder Sugar Refining Co.*, United States Circuit Court of Appeals, Second Circuit, 49 Fed. Rep. 280.)

SHALL IT BE ST. LAWRENCE OR HUDSON RIVER ROUTE?

The recommendation in the House of Representatives by the Committee on Railroads and Canals of the passage of a bill to pay for the cost of a survey to ascertain the most practical route wholly within the territory of the United States, from the Great Lakes to deep water in the Hudson River, carries with it considerable significance; for it is not unlikely that from this or some similar legislative action will soon come the initiative which will result in connecting tidewater with the Great Lakes by a deep-water channel on this side of the line between the Dominion of Canada and the United States.

The deep waterways contemplated by this bill are two: a canal around the Falls of Niagara and a canal from Lake Ontario to the Hudson, the cost of which is estimated at \$110,000,000 by an officer of the United States engineer corps.

It appears from figures and other data presented in the committee's report that the Erie Canal, as has frequently been pointed out at Albany and elsewhere, is no longer able to take care of the enormous tonnage brought down the lakes. The interest of New York state in this bill is very great; in fact, it is urged that New York City's supremacy as the chief port of export and import is actually threatened by the St. Lawrence route, via Montreal, by way of which deep water channels are found sufficient to permit of the passage of ocean-going craft from Duluth direct to the sea.

Statistics in the committee's report concerning the percentage of the sum total of exports of grain and flour from New York City to Montreal show that the former's exports decreased from 1880 to 1889 for grain from 84 to 80, and for flour from 85 to 79½ per cent., while Montreal's exports have gained what New York has lost. A further similar comparison if the respective percentages of total exports of New York City and of the other North Atlantic ports, including Montreal, shows even more clearly that no effort can be spared if New York is to keep her present supremacy. It is said that similar tables for 1890 and 1891 would show a much larger increase in favor of Montreal.

The Canadian Government began years ago the deepening of its canals to the depth of fourteen feet, the same as that of the Welland Canal, which passes down on the Canadian side of Niagara Falls, from Lake Erie to Lake Ontario. Within five years, at the present rate of progress, and perhaps within three, there will be a clear waterway through Canadian territory, fourteen feet in depth, all the way from Lake Superior to the ocean. To quote the language of the secretary of the Duluth Chamber of Commerce, in the house committee's report:

When the time comes I say to you that six feet of water through the Erie Canal, with a transshipment at each end, can no more compete with fourteen feet of water through the Canadian canals, with no transshipment at all, than a wheelbarrow can compete with a freight train. What

does it mean? It means that all the breadstuffs for direct exportation coming from that great region tributary to the Great Lakes will be carried by Canadian instead of American vessels.

It is particularly worthy of note that the report advances the opinion of those familiar with the commerce of the Great Lakes that freight moved from the West to the East will in the future be carried more than at present over waterways rather than by rail, which of course is in the teeth of the notion formerly so commonly entertained that railroads have virtually supplanted water transportation, or that in the future they will almost entirely wipe it out.

Illustrative of the truth of this view it is pointed out that "on the Great Lakes alone there is handled freight to the amount of one-quarter of all of the tonnage carried by all of the railroads of the country, and the proportion is increasing in favor of the water route. This is explained by cheaper and cheaper rates of transportation via the water routes.—*Bradstreet's*, New York.

RICE IMPORTS AND EXPORTS.

Our imports of rice, rice flour, rice meal and broken rice in the ten months ending May 1 were 110,426,727 pounds, valued at \$2,078,587; against 140,600,142 pounds, valued at \$2,862,811 in the corresponding ten months ending May 1, 1891. Of imported rice we exported in the ten months ending May 1, 9,152,790 pounds, valued at \$179,584; against 6,305,204 pounds, valued at \$127,146, exported in the corresponding months of 1890-91.

We imported in addition from the Hawaiian Islands, free of duty, 6,222,000 pounds of rice, valued at \$309,639, during the ten months ending May 1; against 7,840,900 pounds, valued at \$415,630, imported during the corresponding period of 1890-91. A small quantity of this imported rice was exported, 14,150 pounds being shipped in the ten months ending May 1, as compared with 3,272 pounds in the corresponding period of 1890-91.

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CANADIAN SHIPPERS AND ENGLISH IMPORTERS.

Shippers of Canadian grain have done fairly well during the past two years, but the same cannot be said of British importers who, as a rule, have had to take delivery of their purchases at a heavy decline in values, says the *Bulletin* of Montreal. This more especially refers to the business of the past season, which has been replete with heavy, and in some cases disastrous losses. Take, for instance, oats that were sold last winter for British ports at 22s. and have recently been delivered on a 16s. 6d. market, while No. 1 frosted wheat which was sold by a Montreal shipper at 37s and 37s 6d. for delivery this spring has declined to 25s. and 26s. Others sold No. 1 frosted at 35s. and 33s., that have only recently been delivered. Duluth wheat that was sold for May delivery at 43s. to 44s. has declined to 36s. Cargoes of grain have recently arrived in British ports showing losses all the way from \$5,000 to \$15,000 each, which affords some idea of the heavy losses English buyers must have experienced since last fall. And notwithstanding such heavy accumulation of reverses, very few firms on the other side have failed to protect their contracts. One of our large exporters stated a few days ago that in spite of the big losses sustained by receivers on the other side, he had not experienced the slightest inconvenience, every draft being honored, and all his grain taken without any complaint on the score of inferior quality, although this plea is sometimes advanced as a reason for refusing to accept cargoes on a declining market. On the whole, therefore, our shippers of grain have been fortunate in having so few complaints.

The imports of malted barley in April were 112 bushels, against 26 bushels in the preceding April; and in the ten months ending with April 5,035 bushels, valued at \$5,964 against 122,195 bushels, valued at \$77,272 in the corresponding period of 1890-91. None was exported in the ten months ending with April, but 1,191 bushels of imported barley malt, valued at \$830, was exported in the ten months ending with April, 1891.

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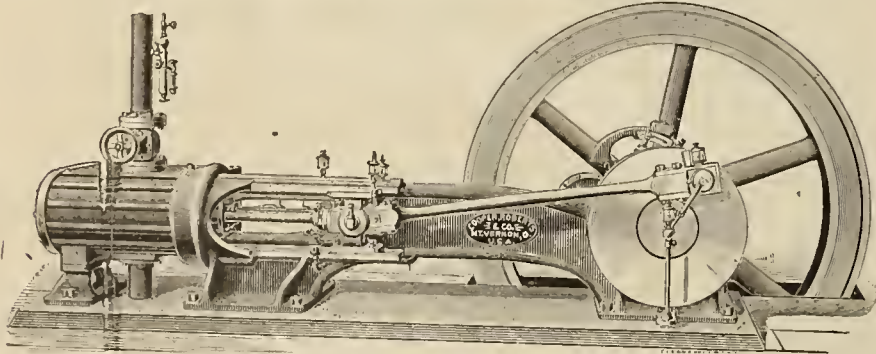
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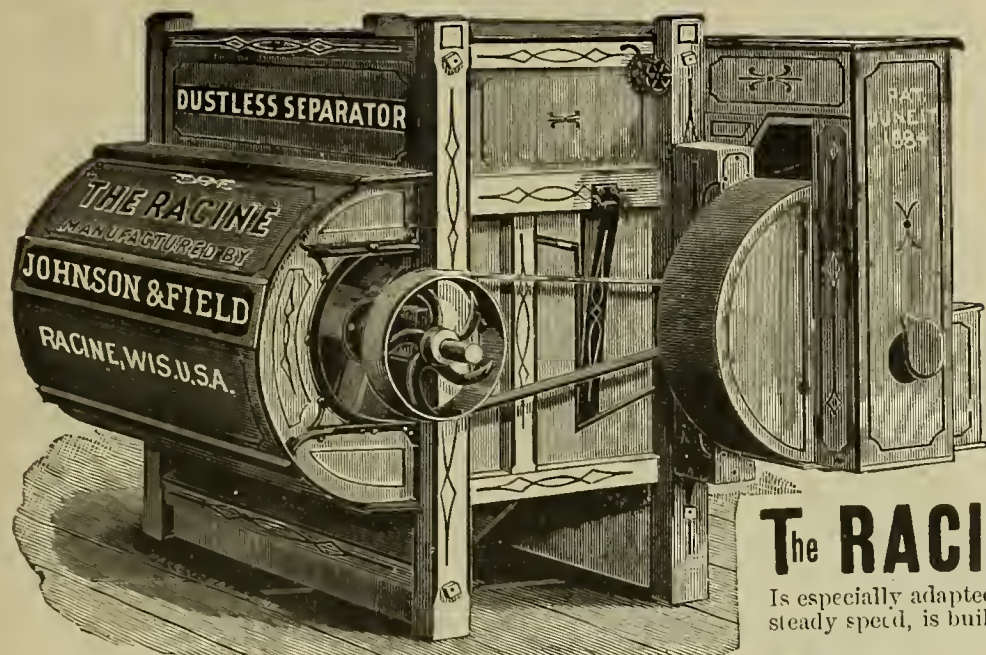
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We are the Pioneer Elevator Builders of the
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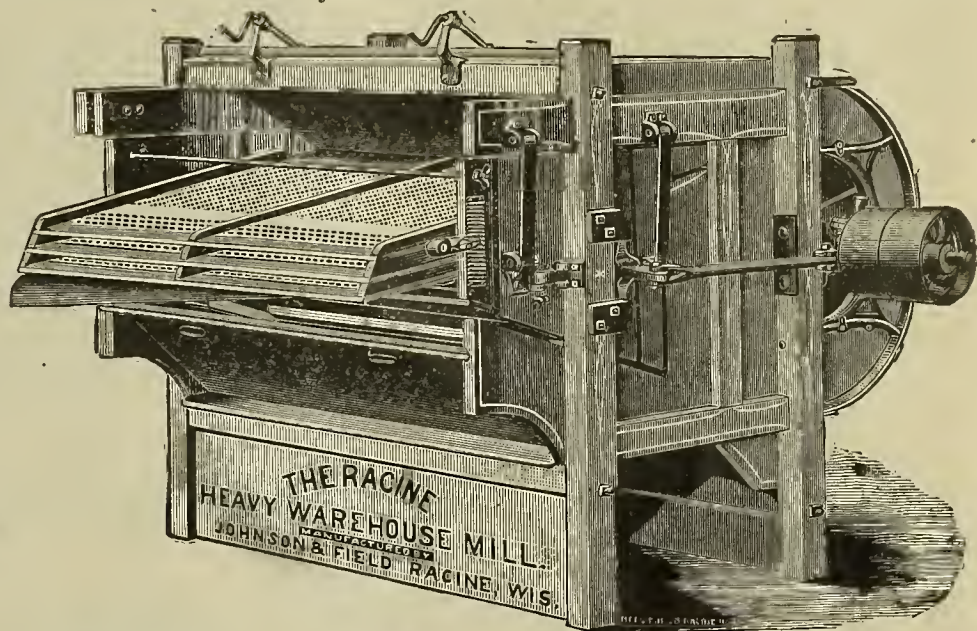
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Than any other machine offered for similar purposes and **Light Running, Large in Capacity, Perfect in Separation** and with **Great Strength and Durability.** These machines have no equal. Admired and Indorsed by many of the largest Mills and Elevators in the country.

Made in different sizes to meet different requirements.

The RACINE HEAVY WAREHOUSE MILL

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Architects of Grain Elevators,

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It is impossible to make a safe contract without a carefully matured plan and a complete working drawing and specifications of all the details. An experienced architect should save you five times the amount of his fee, and arrange for you a more convenient elevator than you can build without his assistance, and he should stand between you and the contractor, and see that you get what you pay for.

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Please write for our descriptive circular.

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The Topeka Mill & Elevator Co., Topeka, Kan.
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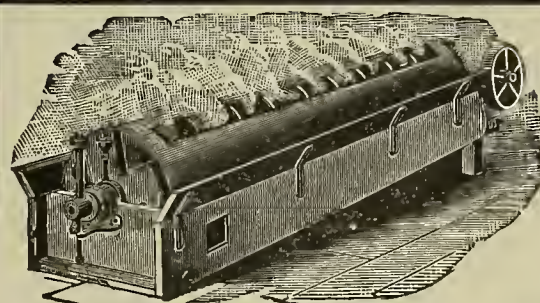
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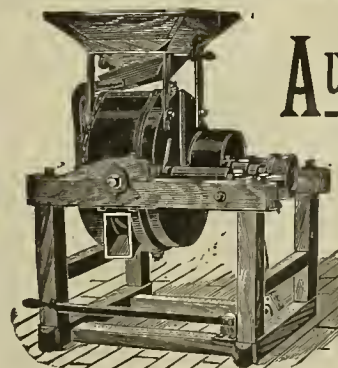


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Drying Cylinder made entirely of Iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

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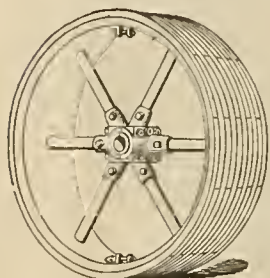
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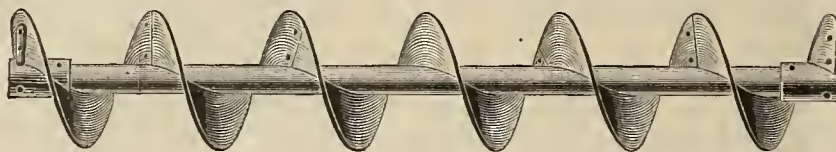


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With Iron Hubs
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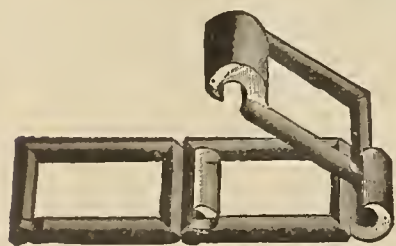
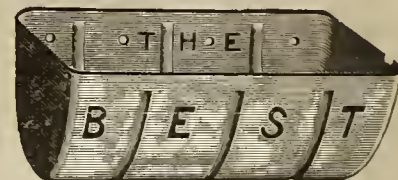
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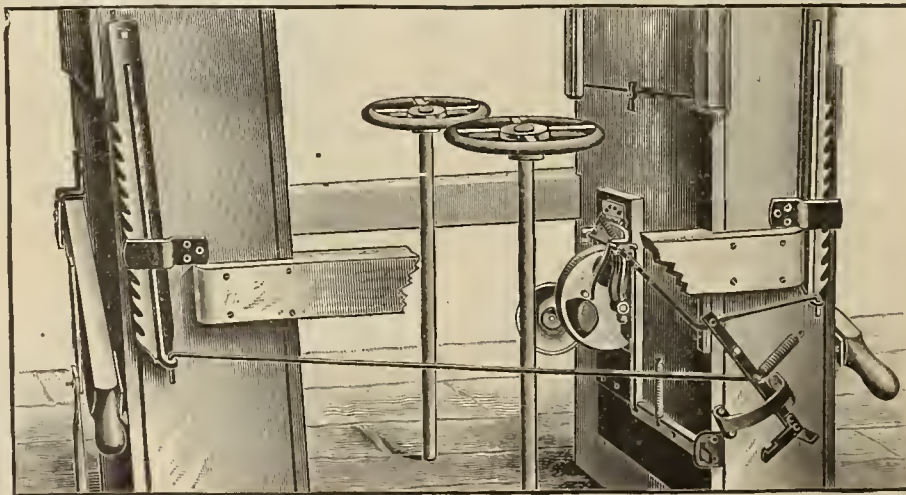
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THE FIDELITY Anti-Choke and Elevator Alarm

Attached to Elevator Legs prevents loss of grain, loss of power, loss of time,
saves belts and prevents the many fires caused by choked elevator legs.



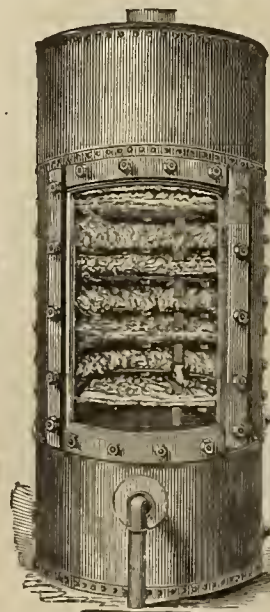
When the cup belt begins to slow down, the machine automatically closes the feed gate, and at the same instant starts sounding a gong loudly and continuously. An elevator equipped with this device will do more work, as the operator can set the feed to carry full cups, and safely leave it under the watchful care of this machine.

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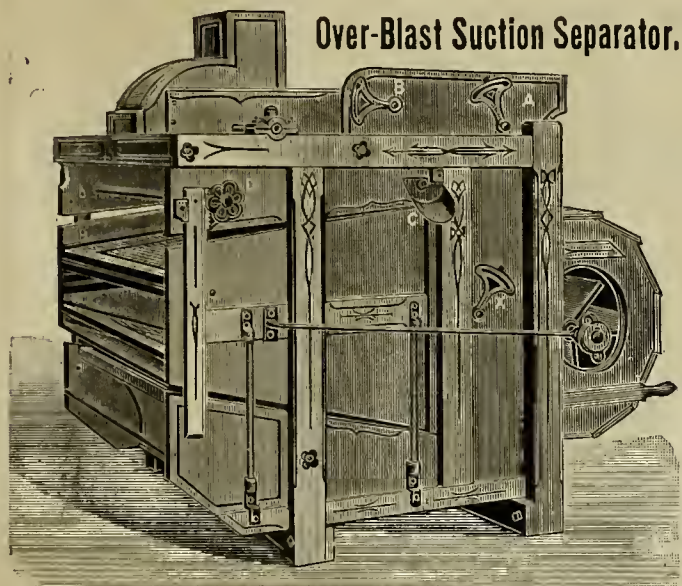
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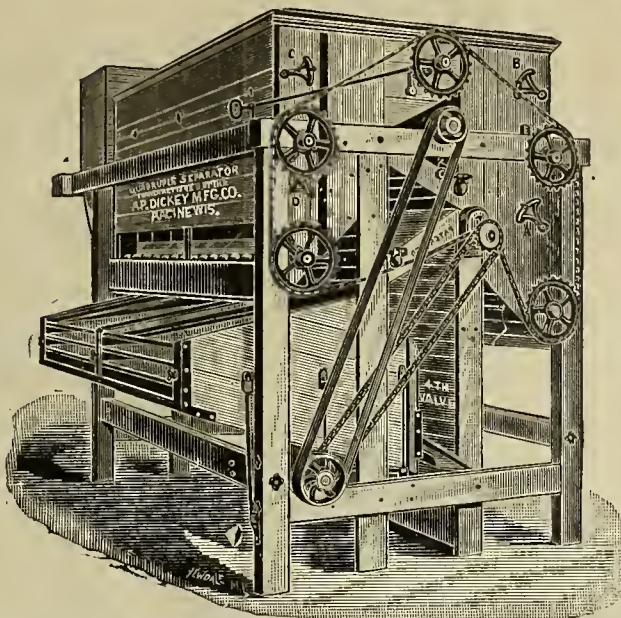
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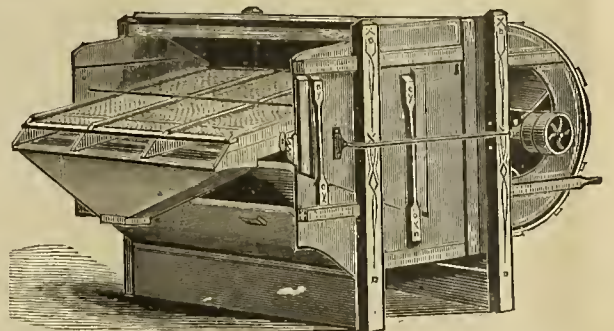
Over-Blast Suction Separator.



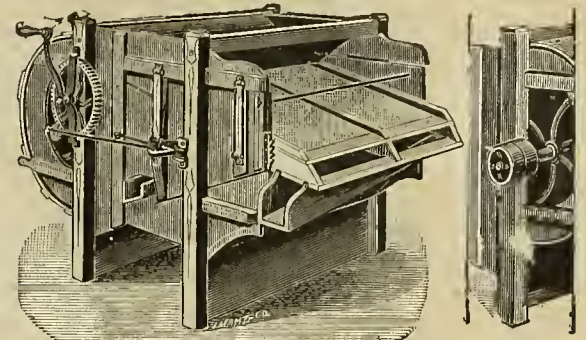
The Quadruple Suction Dustless Separator. Four separate suctions, independent of each other with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

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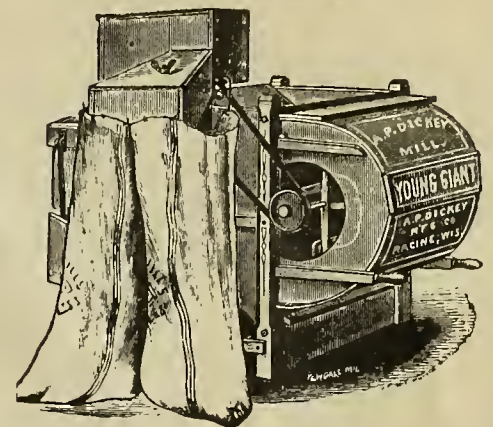
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For Hand Use or Power.

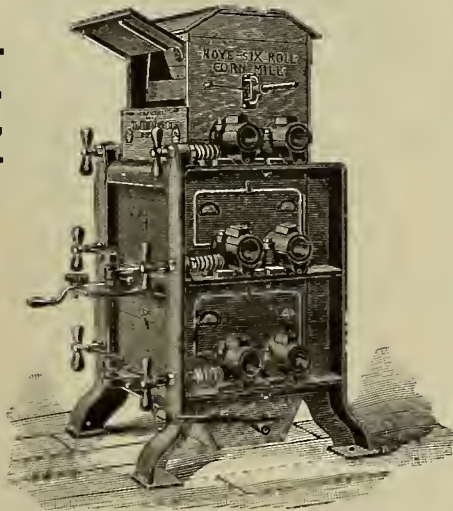


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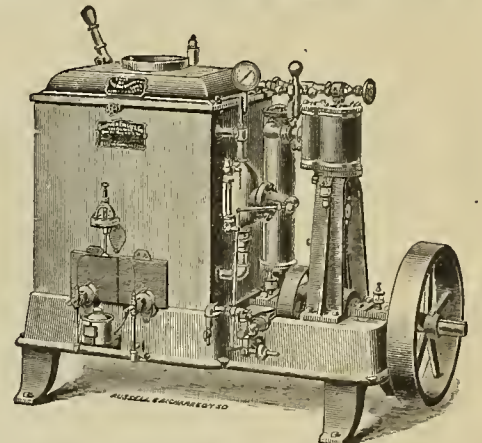
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The most reliable, efficient and satisfactory power for small elevators, elevating water, and all purposes where a small amount of power is required.

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IF YOU GET THE "SALEM" You will be all right.

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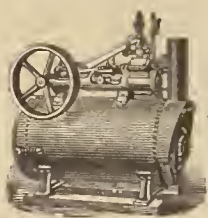
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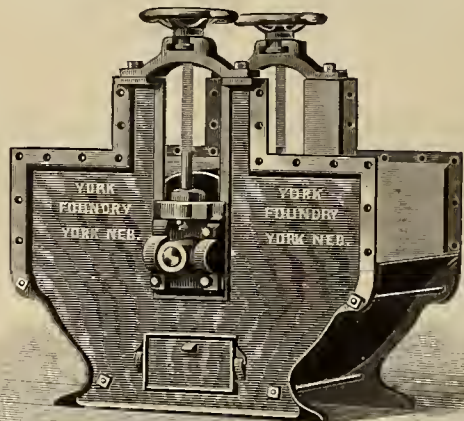
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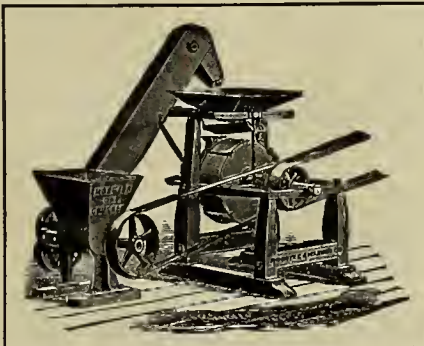
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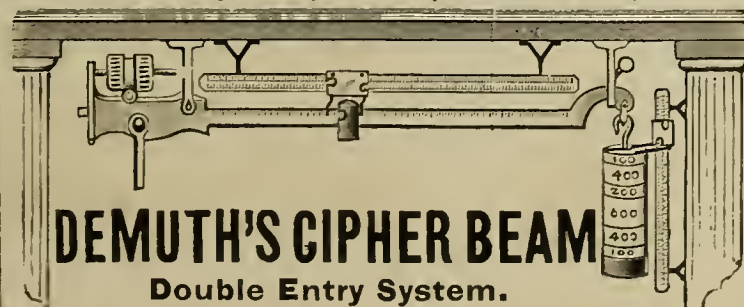


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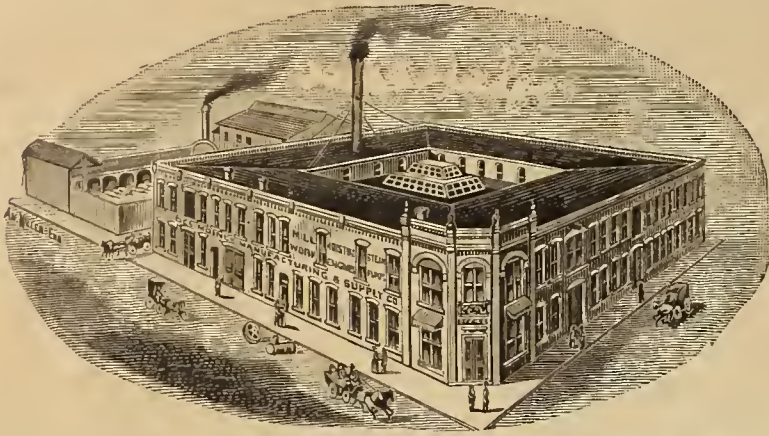
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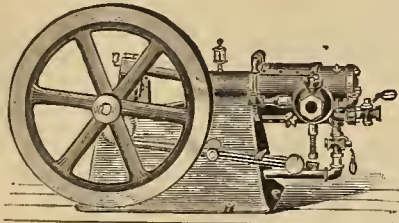
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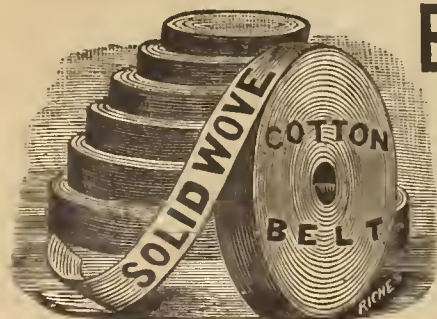
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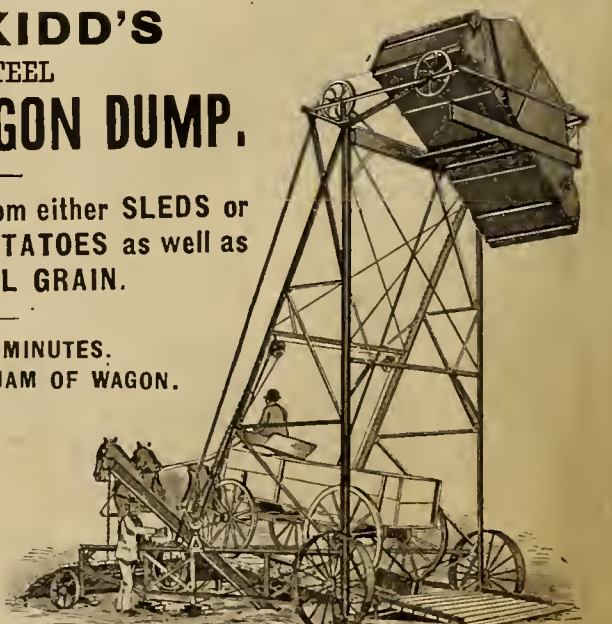
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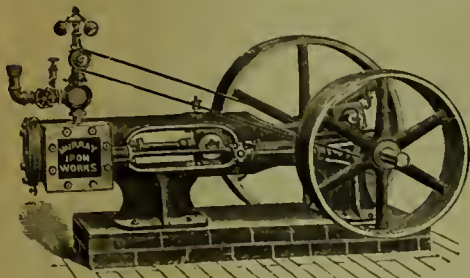
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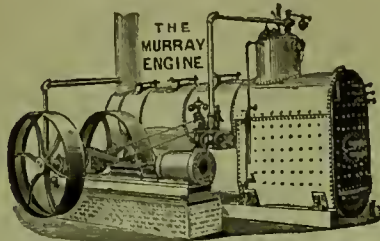
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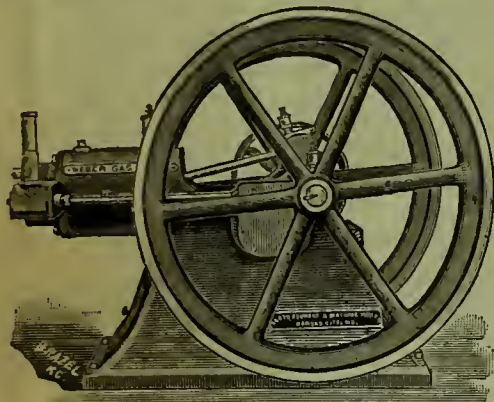
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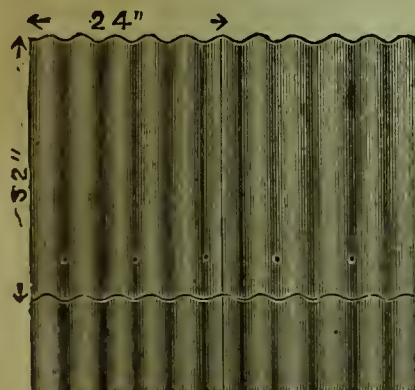
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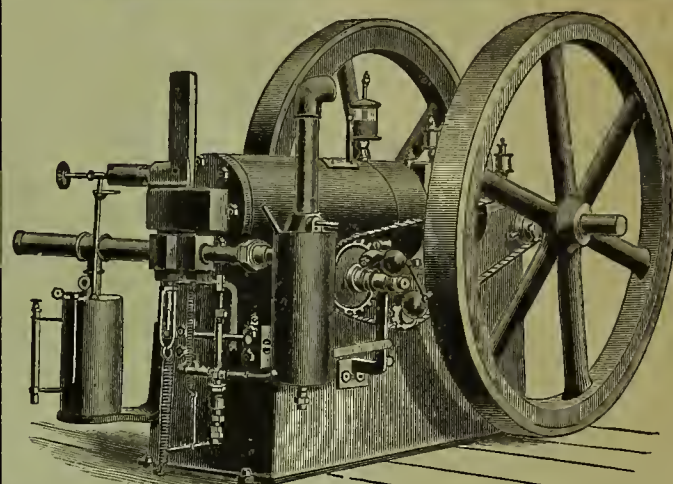
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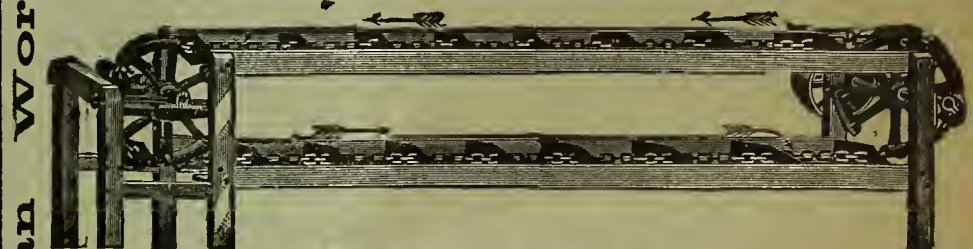
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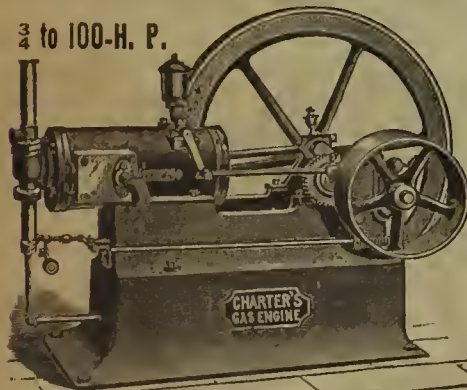
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